

FIRST PRELIMINARY REPORT ON THE
RESTORATION OF THE FRESCOES
IN THE KARIYE CAMII AT ISTANBUL
BY THE BYZANTINE INSTITUTE
1952—1954

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The Committee on Publications wishes to express its gratitude to the Byzantine Institute for offering to the *Dumbarton Oaks Papers* this preliminary account of the major discovery made by the Institute in its field work in Istanbul during the last few years, as well as the brief seasonal Progress Report which follows under "Notes and Reports."

It is hoped that in future other discoveries of the Institute which become available for preliminary publication may also appear in the *Dumbarton Oaks Papers*.

It is our understanding that the preliminary reports on the mosaics of Hagia Sophia will continue to be published by the Institute in the form of separate fascicles.

INTRODUCTION

THIS first preliminary report on the frescoes in the Parecclesion of Kariye Camii * at Istanbul will deal with work finished during the three seasons of 1952, 1953 and 1954 in the conch of the apse, the arch of the bema, and the dome, areas totalling between one-fourth and one-third of its painted surfaces. By the end of the season of 1954 an almost equal amount of surface, not reported on here, had also been cleaned and repaired but not brought to a finished state, so that, from the point of view of total work accomplished at present writing, the proportion is more nearly one-half of the painted surfaces.

Before the systematic program of cleaning was begun in 1952 some exploratory and experimental work had already been done, beginning on June 18, 1951, by Mr. E. J. W. Hawkins, Assistant Director of the Byzantine Institute's field work, in consultation with the author and with the approval of the then Director of Ayasofya Museum, Bay Muzaffer Ramazanoglu, Custodian of the Kariye Camii for the Ministry of National Education, and the Directorate General of Museums of the Turkish Republic. The author wishes to acknowledge with gratitude the facilities which these officials and the Turkish government have made available to the Byzantine Institute in the continuation of this and other work. The experimental work in 1951 was done in the southern half of the arch of the bema,¹ and it brought to light the previously unknown scene of *Christ Raising the Daughter of Jairus*. No attempt was made at that time to carry that area to completion. The immediate purpose was merely to demonstrate the potentialities and problems by cautious experiments of a tentative nature. The results were so encouraging that during the winter of 1951, with generous support provided by the Bollingen and Kress Foundations and by several individual benefactors, the Byzantine Institute was able to make final arrangements for the execution of the project on a continuing basis. At the beginning of work on May 14, 1952, the Metropolitan Museum of New York most generously provided the staff of the Institute with the services of its Curator of the Technical Laboratory, Mr. Murray Pease, who supervised the beginning of the cleaning and, with other members of the staff, conducted further experiments and outlined methods and procedures. While Mr. Hawkins retained general supervisory authority, Mr. Carroll Wales has, since 1952, been directly in charge of the execution of the technical work of cleaning, repair and con-

* The modern Turkish spelling has been adopted. The C in the Turkish alphabet has the sound of J or Dj.

¹ This is noticeable in figure 61.

servation. For the season of 1953 the staff was joined by Mr. Laurence Majewski and Mr. Constantine Causis and in 1954 by Mr. Charles Tauss. The author wishes to acknowledge the great obligation of the Byzantine Institute to these members of the staff for skillful, patient, and faithful work in an undertaking that is exacting in all of these qualities, and to its generous supporters, both individual and institutional, without whose help this work could not be done.

The finished scenes and subjects to be presented here are the following (figs. 63 and 86): in the conch of the apse, *The Anastasis*; in the southern or right half of the arch of the bema, *Christ Raising the Daughter of Jairus*; in the northern half of the same arch, *Christ Raising the Widow's Son*; in the summit of the arch, *The Archangel Michael* in a medallion. The dome contains a medallion at the zenith depicting *The Mother of God and the Infant Christ*, and in its webbings between the twelve ribs and above the windows are twelve *Angels of the Lord*.

The purpose of this report ² is to make available to scholars and the interested general public an adequate account and illustration of these paintings as promptly as their cleaning and conservation permits, and thus bridge the interval between their uncovering and the final publication which must await the completion of this and other work at the Kariye Camii. Of necessity, therefore, the sequence in which the individual scenes and subjects appear in the preliminary reports depends in great part upon the sequence adopted for the practical purposes of their cleaning; hence they will appear in no logical order, either iconographical or architectural.

In view of this limited purpose the discussion will, so far as is possible, avoid anticipation of historical, stylistic, iconographic, and technical studies that are to follow. In some of these fields this will not be altogether possible. For example, in discussing the condition of the paintings and in describing them it will not always be possible to avoid technical information which would be essential to an adequate presentation of the material even in preliminary form. But it should be understood that statements bearing on the materials used by the painters or the procedures they followed are put forward here in a tentative manner, and are not to be regarded as final conclusions, for the technical studies are only now in course of preparation by specialists more competent in these matters than the author himself.

² It has been decided not to publish the mosaics in preliminary reports since they are well known and have been almost completely published in the great work of Th. I. Schmit, *Kakhrie-dzhami* (Sofia, 1906) = *Izvyestiya russkago arkheologicheskago instituta v Konstantinopolye*, XI. In their restored state they will, of course, be published in the series of final publications of the Byzantine Institute of which the frescoes will also form a part.

The Parecclesion ³ (figs. 61 and 85) of the Church of Our Savior of the Monastery of the Chora (now Kariye Camii) lies parallel and attached to the south side of the nave of the church. Its principal entrance is at the west from the outer narthex from which it is separated by two columns bearing small arches in a tympanum. Both the exonarthex and the Parecclesion are among the structural additions erected under the patronage of Theodore Metochites in the early years of the fourteenth century.⁴ Essentially the Parecclesion consists of two bays and a bema, with an apse extending the full width of the Parecclesion. The western bay is covered by a ribbed dome ⁵ on pendentives supported by two transverse arches, the western arch ⁶ a good deal wider than the eastern.⁷ To the east, between the dome and the bema, the second bay is covered by a domical vault. The bema consists of an arch and an apse.⁸ These vaults are carried upon walls ⁹ which, below the cornice, are broken by the projection of piers for the three arches, and by four rectangularly recessed niches with arched soffits, one on each side of each of the two bays. The back of the niche in the northern side of the west bay has been broken through to provide a passageway into the south side of the nave, through what had formerly been an interior chamber. Above and around the arches of these two niches of the western bay are applied marble relief-sculptures, the one in the south side being, in turn, surmounted by the incised verses ¹⁰ of an inscription commemorating the virtues of one of the members of the Tornikes family whose tomb once occupied the niche. The two niches in the second bay were never provided with such sculptural embellishments but originally housed sarcophagi, above which, in the back wall, were painted portraits of the deceased. There is no doubt that the Parecclesion was planned as a mortuary chapel with four niches for tombs.¹¹

The only other penetrations in the walls below the cornice occur on the north side. A small door, just to the west of the above-mentioned passage-

³ See plans in A. van Millingen, *Byzantine Churches in Constantinople* (London, 1912), pp. 317, 318; A. Rüdell, *Die Kahrie-Dschamisi in Constantinopel* (Berlin, 1908), pl. 1; or Schmit, *op. cit.*, pl. LXXXIX. Dimensions of the Parecclesion: length, 16.05 m., width from wall to wall, 4.95 m.

⁴ The evidence establishing this will be presented in a study on the architecture of the building.

⁵ Height: floor to top of dome, 11.18 m.

⁶ Width, 1.70 m.; span, 4.67 m.

⁷ Width, 1.00 m.; span, 4.70 m.

⁸ The width of the arch is 1.60 m. with a span of 4.65 m. The diameter of the apse, at cornice level, measures 4.35 m.

⁹ Height, to top of cornice, 3.75 m.

¹⁰ Transcribed in A. van Millingen, *op. cit.*, p. 330.

¹¹ Further evidence will be presented in later publications.

way pierced through the niche, leads into the original but very narrow passageway that provides direct communication between the nave and the chapel. Another door, near the bema and just to the east of the niche in the north side of the second bay, gives access to the small domed chamber which originally must have served as the *diaconicon* which, in turn, had direct access to the main sanctuary. In the pier at the northwest corner of the chapel a small window provided some light for a small interior chamber. In the center of the apse-wall was a triple-arched window now almost entirely filled with Turkish masonry.

Above the cornice, triple-windows in each of the two southern tympana supply illumination supplementary to that of the twelve windows of the dome. In the northern tympanum of the west bay, a single arched opening leads into a small vaulted gallery in the space between the nave and the Parecclesion.

All the surfaces of these vaults, arches, tympana and walls were covered with mural paintings most of which survive to this day beneath their obscuring paints and whitewashes. The paintings were executed in two zones. The lower zone, from the floor to the level of the cornice, consisted of a painted dado¹² in imitation of marble, surmounted by standing figures of saints. Above the cornice the arches, vaults and tympana are devoted to painted scenes, while the pendentives and the dome contain figures.

In modern times the general condition of the obscuring materials has been such as to render the paintings partially visible. In places, scattered throughout the interior, time and humidity had caused the covering materials to decompose sufficiently to enable those who were familiar with Byzantine iconography to identify the subjects of many of the scenes.¹³ No scene was visible in its entirety and in some instances they were all but completely covered.¹⁴ The only paintings in which style, quality and color could be judged at all were those of the angels in the dome where no whitewashing had ever been done, but even there large areas around the heads, attributes, inscriptions, hands and feet had been crudely covered by opaque yellow ochre paint. In short, so little was discernible that the style, iconographic content and many important elements and details of the paintings had remained unknown.

¹² Height, from floor, 1.40 m.

¹³ For example, M. Alpatov, "Die Fresken der Kachrie Djami in Konstantinopel," *Münchener Jahrb. der bildenden Kunst*, VI, Heft 4 (1929), pp. 345-364, with 19 figures (mostly heads from the lower zone reproduced at small scale), has successfully identified most of the subjects of the scenes as well as many of the saints of the lower zone.

¹⁴ The scene of *Christ Raising the Daughter of Jairus*, for example, had never been identified.

It has been found that the first step in rendering the Parecclesion acceptable to Moslem use was to cover with opaque media all anatomical elements pertaining strictly to human or living creatures, such as heads, hands and feet. In addition, all inscriptions and Christian attributes were similarly covered, but garments, elements of landscape and backgrounds were spared. Thus far it has been observed that two types of covering materials were used for these purposes. By far the most prevalent was a heavy paint containing yellow ochre, but in three limited areas a thin, bright red, dye-like substance was found under the yellow.¹⁵ The second step was a general whitewashing of all painted surfaces, except for the ornaments in soffits of windows, from the cornice beneath the dome down to the floor. It is not clear whether any appreciable interval of time elapsed between these two steps, but in any case the whitewashing was done repeatedly, and in places where the walls or vaults had remained reasonably dry, especially along the southeast and south sides of the building where the walls were exposed to air and sun, the accumulated whitewash has formed a thick crust. In the domical vault of the second bay and in places along the northern walls and the northern halves of the transverse arches, where more humid conditions have prevailed, not only have the covering materials decomposed more extensively, but in places the plaster surfaces of the paintings themselves have been affected. In general it is in these areas that the paintings have become most nearly visible without outside intervention.

At various points, especially in the lower and more accessible zone, crude attempts have been made in the past to uncover small areas of the paintings, and, in three places, even more extensive areas. Unknown persons have scraped the crust of whitewash over seven heads and their accompanying inscriptions in and near the apse just below the cornice (see fig. 62), possibly with a knife, and other figures of the lower zone were similarly treated. There is reason to believe that the figures in the back of the niche in the south wall of the second bay had previously been superficially cleaned, and perhaps some brushing had been done in the tympanum in the north wall of the same bay and in the scene in the south half of the westernmost arch.

In view of these general conditions that have prevailed up to the present in the Parecclesion, it is not surprising that the literature dealing with the paintings in the Kariye Camii has been so limited and, unavoidably, of so little value.¹⁶

¹⁵ Note will be made below of the areas thus affected.

¹⁶ In addition to the article of Alpatov cited above (note 13), the following bibliographical items should also be mentioned: M. Alpatov and N. Brunov, "Eine archäologische Reise nach

Before describing the cleaning methods and the restoration policies that have been adopted, the general nature of the plaster and the characteristics of the medium in which the paintings were executed should be briefly recorded. More detailed information will be presented in context with the descriptions of the individual paintings.

The plaster consists of only one coat about 2 cm. in thickness.¹⁷ Two coats are found only at corners, where one architectural unit ends and another begins. At some of these corners, the plastering of one architectural unit was done after another, and the joining of the two was done by overlapping for a short distance, always at structural angles. Where this occurs the plaster beneath the narrow overlaps was already painted, an indication that the artisans had set up their scaffoldings in limited areas, applied their plaster and painted it before moving on to the contiguous part of the chapel. Except for these points of juncture in the plaster, no other indications of joints have been observed such as one would find in true fresco techniques. This, together with other evidence, indicates that the paintings in the Parecclesion of the Kariye Camii were not in true fresco; for some areas of surface (for example, the entire conch of the apse) are without joinings of any kind, and are too extensive to have been painted in fresco in one operation.

The plaster itself is relatively soft and rich in lime. It was reinforced by the admixture of quantities of chopped straw. This is a material which would never have been used in any thin secondary surfacing of the plaster, and the fact that straw lies at the very surface of the painted plaster, where its decay is everywhere evident in the paintings, is additional proof that the paintings were executed on only one coat of plaster.

While the plaster itself is soft, the paint that lies upon it, where the surface is in good state of preservation, renders the surface very hard and impermeable. The paint¹⁸ was laid on in varying thicknesses depending

der Türkei," *Novyi Vostok*, 15 (1926), pp. 251-261; Émile Caron, "Les mosaïques et les peintures de la Mosquée de Kahrié-Djami à Constantinople," *Bull. monumental*, sér. VI, vol. II (1886), pp. 384-392; *Idem.*, *Congrès archéol. de France*, LIII (1886-1887), pp. 180-188; V. Lazarev, *Istoriya vizantijskoi zhivopisi I* (Moscow, 1947), pp. 213-217; A. Leval, *Catalogue explicatif des principales mosaïques, peintures et sculptures existant à Kahrié-Djami, à Constantinople* (Constantinople, 1886); A. van Millingen, *op. cit.*, pp. 288-331; A. Rüdell, *op. cit.*, pp. 11, 12, 21, fig. 13, pls. 6, 9, 28, 31; Th. I. Schmit, "Mosaiki i freski Kakhriedzhamii," *Izvest. russ. arkheol. instit. v Konstantinopole*, VIII (1903), pp. 119-152, pls. 18-20; A. Xyngopoulos, "Ἡ κηρόχυτος γραφή τοῦ Χρυσοστόμου," in *Ἐπετηρίς Ἑταιρείας Βυζαντινῶν Σπουδῶν*, vol. 21 (1951), pp. 49-58; and *Eikones prophētōn*, *ibid.*, 23 (1953), pp. 45-56.

¹⁷ Opportunities to observe this fact presented themselves at the many places where losses of the original plaster have occurred and the thickness and character of the plaster have been exposed.

¹⁸ The medium has not yet been identified.

largely upon the amount of repainting required in a given passage to build up to the desired effect. The backgrounds, for example, are relatively thin, but in such places as the highlights of draperies it attains considerable thickness, amounting to an impasto.

The procedures and methods employed in the cleaning of the paintings vary according to the nature and condition of the overlying materials, and the state of the painted plaster surface beneath. Where the whitewash was found to be in a flaky condition, and the painted surface was sound, the whitewash was removed with manicurists' orange-sticks or comparable instruments. The residue of lime was then removed by repeated sponging with soft sponges and clear water. The bloom that still remained was left for later treatment, and will be described below. At the Kariye Camii the flaked areas that could be treated in this manner were not extensive.

Where the crust of whitewash was intact and hard, amounting almost to a thin coating of lime plaster, it was softened, in limited areas at a time, by repeated spongings with clear water. Usually this condition in the whitewash was accompanied by a very sound condition in the painted plaster surface beneath, and little by little with adequate softening the whitewash could be gently removed, either with wooden instruments or small sharp tools, without loss or marring of the paint.

In some areas conditions were found where, apparently, secretions of lime salts had produced a thin but exceedingly hard and tenacious calcareous deposit beneath the whitewash on the very surface of the painting. To some extent it responded to patient use of abrasives by careful scrubbing with small brushes dipped in water and powdered pumice, but for the most part it had to be cut away with small, sharp tools.

There were areas where, owing to the decomposition of the painted surfaces themselves (see figs. 74, 83), the covering materials had vanished to a considerable extent, but where the surface was so friable that little if any cleaning could be performed without destroying the remaining traces of paint and color. In some of the worst of these areas vinyl acetate was used to consolidate the crumbling surfaces.

Much more difficult than the removal of the whitewashes when in their usual condition was the cleaning of the areas of yellow paint beneath the whitewash. These were all the more troublesome because they occurred, among other places, over the most intricate and delicate passages of the paintings, namely, the heads. As was said above, the hands, feet, and inscriptions were also covered by the same substances. Moreover, certain mixtures used in the paintings have proved to be less durable than others, or have reacted more readily in an adverse manner to the conditions to

which they have been subjected. Among these pigments are certain yellows and browns which appear so extensively in the painting of the faces and hair. This often accounts for losses in the painting of the heads as well as in other places in which the painters used these pigments, such as the yellows in the gold brocades on the garments of the Kings (fig. 74), or the yellows in the borders of the covering of the bed in *Christ Raising the Daughter of Jairus* (fig. 78). These losses are attributable not to the removal of the covering paints, but to deterioration of the paint and of the plaster surfaces.

Fortunately, most of the areas that had been covered by yellow paint and then by whitewash have responded surprisingly well to long hours of patient and gentle treatment. In these cases the best results were obtained by rubbing gently and briefly with cotton swabs dipped in water and powdered pumice, then by sponging with water. After frequent repetition of this operation all traces of yellow paint were removed.

In the dome, however, where no whitewashes ever covered the yellow paint, the situation was altogether different. There the yellow paint was not necessarily harder or more nearly intact than in other places, but, perhaps because it had not been whitewashed, or because the dome remained drier than other parts of the chapel, the yellow paint adhered more firmly to the surface of the paintings. In any case, the tendency here was for the painting itself to separate from the plaster, and the methods used elsewhere were not adequate. In the dome, therefore, the yellow paint was sized with hot gelatine which to some extent seemed to penetrate to the painting. Cotton swabs dipped in warm size-water were then used, and the swabs absorbed and softened much of the yellow paint. With this method, it was found, a certain amount of sizing was always present in the cleaning, and, as the painted surface was approached, it had the effect of causing the painting to adhere much more securely to the plaster surface. Nevertheless, there were unavoidable losses. These were more frequent and extensive in the hair than in the features, perhaps because of the presence of the yellow and brown pigments that have proved elsewhere to have been so non-durable.

It should be mentioned that in the past when grouting from the outside of the dome was done Portland cement seeped through certain fissures and ran down for short distances along the edges of two ribs. In no case did the cement run over a figure, but it did mar the ornament of one and the red border of another. All that could be done was to cut away these drippings with chisels, causing, unfortunately, rather heavy losses to the painted surfaces.

Repairs that have had to be made to the plaster and the paintings are of different kinds. In some places, for example in the scene of *Christ Raising the Widow's Son* (figs. 81, 82), extensive areas of original plaster had fallen away from the masonry and had been replaced by crude patches. In the dome less extensive losses of plaster occurred along fissures where the fabric of the dome had been shattered by earthquakes. These are noticeable across certain ribs and segments of the dome and in the crowns of some of the arches (figs. 90, 91, 95, 101).¹⁹ Losses in the reveals and soffits of the windows of the dome are considerable (fig. 86) but not as extensive as present conditions would lead one to believe, for the original window frames were set much nearer the inner surfaces of the dome than are the modern frames now, and the reveals were not as deep. In each instance the patching plaster was removed and new plaster applied. Similarly, wherever plaster losses have occurred, the areas, no matter how small, were replastered. This applies also wherever the plaster was "bruised" by having been struck.

As mentioned above, chopped straw has been found in the plaster; this is noticeable at the very surface of the paintings throughout the Parecclesion. Many of the straws at the surface have rotted, leaving narrow pittings in the surfaces and, of course, losses of paint. Some of these were too deep and too disfiguring to leave untouched. There are also places where further deterioration of the surface could occur and the pittings gradually enlarge. The largest and most conspicuous of these were, therefore, filled with new plaster.

Finally, the slight powdery coating or bloom that remained on the surface was removed by washing down with a very light solution of acetic acid, almost immediately neutralized with ammonia.

The glaring white plaster of all the repairs had to be toned, but no rigid and invariable rule for the toning was adopted. The general policy was to try to render each loss as inconspicuous as possible in its own surroundings, without in any way concealing its existence. Each of the larger areas of repair was, therefore, given a neutral tone of the most prevalent general color of the paintings in its vicinity. These tones were made flat and textureless as a further means of distinguishing repairs from original paint. After the plaster was sized the color was applied in egg tempera usually with a broad brush. When there was no single prevailing color in the areas around the repair, but rather two contrasted colors on either side, it was sometimes found effective to bridge the two by passing from a neutral shade suitable to one side into another shade suitable to the other side. Wherever a repair

¹⁹ Even more extensive losses, owing to similar conditions, are found in other parts of the Parecclesion not included in this report.

passed through an ornamental rib or an ornamental band around a window in the dome, for example figure 86, the two narrow trimmings of red at the edges of the ornament were painted in on the repair, but in a somewhat lighter tone, and, instead of the design between the two borders, a flat tone of the color of the background of the ornament was applied, again in a lighter shade.

The small areas of lost paint and the small repairs where the straw had rotted, were touched with color, again in egg tempera, with a very small brush, in flat tones. The colors used were those that corresponded to the lost paint, but were of a lighter value. On close inspection, even in a photograph, they are easily identified, not only because of difference in value, but because they are very thin in consistency, and are, therefore, at a slightly lower level than the thick paint around them. Furthermore, their mat appearance contrasts with the surrounding paint.

THE PAINTINGS

THE ANASTASIS (Figures 63–75)

The condition of the conch prior to its cleaning is illustrated in figure 62.²⁰ The subject was identifiable as *The Anastasis* even though most of it was invisible, by the evidences of a central nimbed figure within a mandorla, and by the figures of two kings and Adam dimly visible at the left.

The cleaning revealed it to be a monumental composition (fig. 63)²¹ amply filling the conch and arranged symmetrically around the central figure of Christ. Compositionally, the artist used the traditional device, so frequently employed in domical compositions, of focalizing the center of interest and the chief protagonists in a great triangle, in this instance Christ with the figures of Adam at the left and Eve at the right. The base of the triangle is weighted at its two ends by the two sarcophagi, and the apex is formed by the point of the mandorla which frames the figure of Christ. Balancing one another at the two sides are the compact masses of the Righteous relieved against the enveloping barren crags of Hell. Standing at the very points of the triangle, and somewhat detaching themselves from these groups, are Saint John the Precursor at the left, and the youthful Abel at the right. In the forefront of the Righteous at the left are David and Solomon

²⁰ The original tie-beam in the arch of the bema is of oak boxed in with thin boards on which decoration was painted. It was found to have rotted at the two ends where it entered the walls. Because it was removed and stored to facilitate work in the apse, it does not appear in fig. 63.

²¹ Along its curved base the painting measures 6.78 m.; at its center it measures 3.40 m in height along the curved surface of the vault.

with other Kings all distinguished by haloes. Christ stands upon the edge of the black abyss of Hell, the broken gates and the shackled figure of Hades beneath His feet. Throughout the abyss are the scattered locks, bolts, hinges and nails of the shattered gates.

The dramatic action that all are witnessing is Christ's triumph over Death and redemption of the Righteous, symbolized by His act of raising Adam and Eve from the dead. Pictorially the action is most convincingly presented. The figure of Christ (fig. 64) is unusual in the luminous effect of its soft white draperies daringly painted against a mandorla that in the paleness of its blues so nearly approaches white. The material of the white chiton and himation clings to the figure sufficiently to permit the anatomical structure to participate with the directions of the folds in creating an extraordinary sense of physical movement and force. The inclination of the figure and its accompanying mandorla, together with the posture of Christ, produce the effect of three simultaneous motions: an almost vertical one of lifting on the right, an advance toward the left, and a pulling of Adam from the left toward the right which is achieved by the perfectly straight arm of Adam and the slightly flexed right arm of Christ. The vigor and power of Christ contrast with the inertness of Adam and Eve as an expression of the meaning of the entire composition: the triumph of Christ, the Giver of Life, over Death. The same contrast is strikingly expressed in the painting of the hands (figs. 70, 71).

The figure of Christ (fig. 64), drawn at a little less than life-size, measures 1.63 m. from the top of the head to a line drawn horizontally at the feet. The head measures .245 m. from the tip of the beard to the top of the head. Christ is dressed entirely in white garments, seemingly of soft, fine linen. The color and treatment of the chiton and himation are identical. The former is visible over the breast and in the sleeve at the left, and again in the strip of highly decorative folds above the feet and below the himation. Over the shoulder a gray *clavus* is woven into the fabric of the garment. In the painting only the highlights are pure white. The drapery folds and the *clavus* are indicated, and the shades and shadows rendered, in two principal values of gray. The darker gray is used in the lines defining the drapery-folds which are usually bordered on one side, or on both, by narrow trimming lines of pure white. The lighter grays were reserved for the middle tones or half-lights, which are generally applied quite flatly but sometimes subtly graded. The quality of the gray paint is slightly warm, for it seems to have been a mixing of white not simply with black, but also with some yellow.

The himation wraps around the waist, passes up behind the figure and falls in front over Christ's left shoulder and arm, cascading in a large fold that falls free of the body and ends in a little hook at the level of the knees. The lower part of the body is covered by this garment which is treated here in a most effective arrangement of drapery-folds. The coloring of the garment is exactly the same as that of the chiton, except that some of the shadow lines along the outer contour of the thigh at the right are effectively rendered in long and rather narrow brush-strokes of light blue over the gray. The source of light is from above and from the beholder's left.

The head of Christ (fig. 65) was found to be in remarkably good state of preservation. Such losses as occurred were mainly in the hair of the left side, clearly detectable in the illustration. The plaster and painted surface had been dented by being struck at three points: at the top center of the forehead, at a point in the lower cheek to the left just above the mustache, and in the edge of the beard immediately to the left of the lower lobe. Only at this last point did the denting cause a loss of paint. The head was one of three places thus far discovered where a bright red, dye-like pigment had been used to efface the features. Over this the yellow paint had been applied, and of course, finally, whitewash lay on the surface.

To aid the reader in visualizing the description of the head the color notes below will sometimes be stated in terms of such specific colors as could closely reproduce those of the original, but this method of identification does not imply that these were the pigments actually used.²² Since the colors and techniques used in the head of Christ are essentially the same as in most of the other heads, it will be taken as typical of those that are not described.

The drawing is done, for the most part, in umber lines. The modelling of the areas to be shaded, in the features as well as in the hair, are worked up in terre verte. Flesh tones are applied in yellow ochre mixed with white; into this, especially at the cheeks, some light red is worked, and a brightening is achieved by means of fine hatching lines in red. The features and the locks and strands of hair are picked out in umber, and here and there flecks of white are used for highlighting. The direction of the brush strokes tends to follow the flow of the surfaces represented. The treatment of the hands and feet was similar to that of the flesh parts of the head.

The nimbus, like all others, was described with a compass. The area reserved for the nimbus was painted yellow. It seems likely that this was applied over the already painted mandorla, for bits of the blue of the mandorla show through here and there. A mordant was applied over the

²² See above, p. 256.

yellow and then gilded, for many small flecks of gold leaf were found upon the surface and still adhere to the nimbus. The nimbus was trimmed with a narrow border of brown and an outer border of white. Undoubtedly the arms of the cross in the nimbus were painted over the gold. No evidence of them now remains except for some scratches done freehand before the leaf was applied.

The pointed mandorla (fig. 64) is inclined to the left accompanying the action and posture of Christ. It is made up of three concentric zones of blue, each of a different value. The inner zone, largely covered by the figure, measures .83 m. at its widest point. Its shade is that of the lightest blue of some of the garments. The second zone is a very light blue varying in width from .13 to .15 m. The outer zone, whose effect is now that of an extremely pale blue-gray, is bordered around the outside by a narrow line of pure white, and is of the same breadth as the second zone. On removal of the whitewash, stars became visible here and there throughout the mandorla, especially strongly at the upper right. In some places they were all but invisible. Originally these were done in gold leaf laid over a mordant. The gold leaf of all but two of the stars has vanished due to the whitewashing and the dissolution of the adhesive qualities of the mordant. However, some of the points of the star in the outer zone just to the right of the right-hand elbow, and the star above in the middle zone still retained some traces of gold leaf. Although in most cases no actual color for the stars remained, it was clearly evident where they had been, and even their exact pattern was traceable where the blues of the mandorla on which they were placed was of a brighter hue than the surrounding blue that had been dulled somewhat by exposure and the action of the covering lime washes. These "ghosts" of stars were particularly strong when the surface was wet. They were carefully replaced in a dull red paint to avoid confusion with original work, and no attempt was made to re-gild them. All the stars were eight-pointed, and formed by small, sharply tapering strokes that radiated from a central dot. The stars average about .10 m. in diameter.

The aged figure of Adam (figs. 66, 68) is clad in a white himation worn over a blue chiton. The latter is visible only in its left sleeve and in a small part of its hem near the right foot. The blue in the sleeve is lightened toward its upper edge by the addition of white, and becomes somewhat deeper in tone toward the lower edge. The lines of the folds along the top of the sleeve are bordered on one or both sides by pale blue lines in some instances, and by pure white in others.

In the outer garment the back and the upper parts of the sleeve are treated like the garments of Christ, that is, in a warm gray. There is in this garment another analogy to the painting of the figure of Christ, for worked into the drapery folds along the great curve of the back, from a point a little above the back of the knee to the hair, are long narrow lines of pale blue, which serve to enhance the modelling of the body. The flying-drapery above the back and the areas where the drapery-folds converge below the right sleeve are considerably deepened by the addition of a darker pigment.

The head (fig. 68) is strongly modelled, and contains particularly fine passages in the features and in the hair. Bold white strokes of heavy paint serve to give a brilliant play of light to the entire head, and indicate the venerable whiteness of Adam's hair and beard.

The long side of Adam's sarcophagus which recedes into the abyss is painted a pinkish brown color, and its moldings are indicated in darker and lighter values of the same color, and in white. These colors were also used in modelling the ornamental motifs. The end of the sarcophagus is basically the same in coloring but of a redder tone. Beneath Adam the interior faces of the other two sides of the sarcophagus are shown. A considerably darker value of the same color is applied on the far end; a slightly less dark on the fourth side.

Eve (figs. 67, 69) is enveloped in a great red garment which all but conceals a tight-sleeved blue tunic worn beneath. The lower part of the right sleeve and a portion of the hem above her left foot are the only visible parts of the tunic. The treatment of the blue sleeve is similar to that of Adam. Along the lower edge is a rather wide zone of shading which is the black underpainting of the sleeve. The light blue color above it is merged into the black by hatching, while the highlighted area at the top is applied in light blue. The dark lines of the folds are produced simply by the use of narrow bordering lines in white and very light blue on each side of a strip of the black underpaint.

The great loose *maphorion*, painted in an earth red which is similar to Venetian red, covers most of Eve's body, her head, left arm and hand. The middle tone of red seems to have been painted rather evenly over the whole surface of the garment. The drapery folds and the shaded areas were then painted over this in appropriately deepened values of the same color, and, at the opposite extreme, the lights were built up by the addition of white in varying amounts. Gradation toward the highlight in the left thigh is done by successively lightened bands. In some areas brightening is achieved by

fine hatchings. No pure white was used in any of the highlights of this garment.

The covering of the left foot is painted in black.

A technical device, found now and again among the figures in the Anastasis and other scenes, is particularly evident in the painting of Eve. In the red of the garment freehand lines, incised or scratched into the plaster, are visible in certain lights. These incisions do not delineate the entire figure, but appear in varying lengths along important anatomical lines or within complicated passages of drapery treatment, and correspond only roughly to the actually painted version. For example, one gently curved line was incised down the front edge of the left thigh to the point of the knee, and another, drawn at an angle to it, appears at the groin. A sharply curved line was drawn along the underside of the left upper arm from the armpit, around the elbow, and for a short distance along the under side of the forearm. It is picked up again around the covered hand and along the upper edge of the same forearm. Somewhat above the actually painted upper arm and curve of the shoulder another series of incised lines indicates the original but approximate intention of the painter in the definition of these forms. A brief portion of the curve along the left side of the head is incised. The most elaborate system of incised lines is found within the interior folds of the flying-drapery (fig. 104), but it varies considerably from the actually painted forms. It is probable that the lines were incised after the application of the flat red paint over the entire garment, and were intended as an aid in determining the approximate placing of the forms to be worked up in paint in the lighter and darker values. In the Anastasis such lines are also found, to varying extent, in the draperies of each of the three figures in the front row (including Abel) of the group at the right, and in the figures of David and Solomon at the left.

The sarcophagus of Eve is painted in the same general colors as that of Adam. One of the most difficult areas to clean occurred over a large part of the front of this sarcophagus where a thin, but extremely hard and tenacious, calcareous deposit was found directly upon the surface of the paint and beneath the thick covering of whitewash.

In the same sarcophagus with his mother stands the youthful figure of Abel (fig. 72). He wears a richly decorated tunic of moderate length which has long loose sleeves and is gathered at the waist. The tunic is green, painted, perhaps, in malachite, highlighted in white. The ornamentation at the collar, hem, arm bands, and cuffs consists of wide bands of gold brocade executed in yellow paint with designs in reddish brown. The garment is

drawn in perspective to be seen from below, and thus reveals the lower parts of the legs clad in pantaloons of purple, possibly hematite. The ankles are covered with gray bindings. Abel carries his attribute, the shepherd's crook, held vertically in his right hand. The staff is painted in ivory black while the crook, originally painted white, has turned a pale green for reasons explained below.

The garments of only five of the six compactly grouped figures of the Righteous at the right (figs. 72, 73) are visible in part or in whole. Wherever it is possible to judge they, and their six counterparts at the far left in the conch, seem to be dressed in chiton and himation. Wherever it is visible, the chiton is blue, but generally darker in effect than the blue in the garments of Adam and Eve because of the more sparing use of the light blue which is painted over the blue-black base.

The himation of the figure who stands in the front row to the right of Abel is painted in red-violet. It is highlighted in white, and transitional passages are painted in red-violet lightened with white. There is considerable use of hatching in these transitional areas. The folds are drawn in the pure color.

The figure at the far right, on the other hand, wears a golden yellow outer garment of the same color as that used in the brocades of Abel's costume. The drawing is in reddish brown. The highlights are in white, and again there is much use of hatching; in this instance in light values of the yellow. Wherever losses occurred in the yellow paint of this himation a green paint appeared beneath (at many scattered points), and at one point, to the right and behind the knee at the far right, a small blob of the same green is visible as though it were a drapery ridge at the contour of the figure; this suggests that it had first been painted in green, then painted over in yellow.

Only relatively small parts of the drapery of three of the four figures behind the two in the front row can be seen. The yellow himation of the figure partially visible between Abel and the figure on his left is treated in general like the yellow garment of the figure at the far right, but with this difference; that it is kept more subdued by the avoidance of pure white in the highlights so that it will recede somewhat into the background. A very small portion of the drapery of the central figure of the second row is visible. It too is painted in yellow. Beside him, the third of the series in the second row is clad in a green himation visible over his left shoulder and in a small area at the hem. The green drapery folds are highlighted by borders of white and blue; some blue is also used as hatching.

Standing somewhat apart at the head of the group in the left side of the conch is St. John the Baptist (figs. 64, 74, 75), Precursor of Christ, who turns to the others at his right as, with his extended left hand, he indicates Christ who has come to redeem the Righteous. He is dressed in chiton and himation of somber colors appropriate to the ascetic. The chiton, visible in the voluminous left sleeve and over the left shoulder, is painted in brownish yellow such as might be obtained by use of yellow ochre and umber. The folds are indicated in deep values of the umber, the highlights in light values of the yellow. White highlighting is restricted to portions of the sleeve of the extended left arm. At the shoulder the *clavus* is painted in black. The himation, worn in the reverse manner to that of Christ, is painted a dull brownish green, perhaps in terre verte with the addition of black. The highlights are subdued, never achieving full white.

In accordance with the accepted type, John's features (fig. 75) are lined and weathered; his hair and beard, worn rather long, are disordered by unruly twisting locks. Three locks of hair fall forward over his left shoulder; another, whose paint is nearly lost, extended well down over the right shoulder.

The nimbus of John, which now exists only in yellow paint or mordant, was, in all probability, originally covered with gold leaf. Like the nimbus of Christ it was outlined in brown and in white.

The condition of the painted surface in the figure and head of John is only moderately good, and to the left in the conch it becomes progressively worse.

The mass of figures at the left (fig. 74) is composed of two categories of personages. At the right, near John the Baptist, several kings are represented. Insofar as the poor condition of their colored nimbi permits one to judge, the artist intended to represent six kings. In the front row are David at the left and Solomon at the right. Both are attired in Byzantine imperial dress — the chlamys over the *divitission*. The chlamys of David is dark blue, that of Solomon is red. Each is fastened at the right shoulder by a fibula, originally decorated with pearls. Each chlamys was further decorated by a golden *tablion* executed in yellows and red. The front of the chlamys is held aside in each case by the extended left hand thus revealing the *divitission* to almost full extent. The *divitission* of David was painted in a light reddish violet. A red belt or girdle is worn around the waist. The garment was heavily brocaded over the shoulders, down the front as far as the waist, and in a wide band at the hem. Around the edges of the brocade traces of pearls are still visible. As usual these brocades were painted as a yellow field

with red patterns. Solomon's *divitission* is green, and, except for slight differences in the belt, is like that of David. All the kings whose feet and legs are visible wear red, stocking-like, foot-wear, possibly buskins, decorated with gold and pearls.

The crowns are discernible only in general terms, as very little of the paint and almost no recognizable details except the shape now remain. Traces of pearls, however, are to be seen here and there.

The features of the two kings need no comment. Although the surface had been badly weathered, they are rather clearly distinguishable, and conform to the commonly accepted types of both David and Solomon.

The features and costume of a third king are partially revealed between the two kings in the front row. His chlamys is green and his *divitission* red.

The haloes of the kings are the only ones thus far encountered that were not of gold or yellow, but of other colors. The nimbus of David was originally a very pale violet, but, except at the left, little of the color now remains. The nimbus of Solomon was pale green as was another at the far left above the halo of David. One other halo retains some traces of color, in this instance a light violet. Only these two colors can definitely be said to have been used for the six haloes.

The presence of the kings in the left side of the conch has given that side a larger number of figures than the right, and has caused the remaining group of six Righteous, counterparts of those at the far right, to be crowded into a very small space at the extreme left. This may account for the generally smaller dimensions of the figures on this side of the conch,²³ and for the fact that only one of the six figures stands in the front row, free from overlapping by others. Like their pendants at the right, they are all clad in chiton and himation, and wherever it can be seen the chiton is blue. The himation of the one fully revealed figure is light violet, occasionally shot with blue as an overlayer, though this treatment was limited to small areas. In some instances the blue served to model the figure, as is especially noticeable in the right thigh, but in others it gives, locally, a two-color effect to the garment. The figure between David and the Righteous One at the far left wears a yellow himation. Very little more than the heads of the remaining figures can be seen.²⁴

²³ Average height 1.37 m. as opposed to 1.45 m. in the group at the right.

²⁴ The third area in the Anastasis where the red dye-like pigment was used as covering material was found in the upper left areas of the heads in this group, and principally affected the head at the top left.

In the two sides of the composition (fig. 63), the massed figures are relieved against an arid landscape of starkly barren rocks. The rocky background at the left, and in the center as far as the sarcophagus of Eve, is generally warm in coloring in contrast to that of the far right. In the left and center areas the general tones were greenish yellow. The shaded facets of the rocks in the peaks are *terre verte*, and the shadows are indicated in a warm brown, like umber. Some highlights are in white approached by yellow ochre mixed with white. A few shaded facets at the top left and above the haloes of the kings are in blue. At the far right, on the other hand, yellows were sparingly used, if at all. The general tone is a rather cool greenish gray. The shaded areas of the under facets of the crags are painted in a dark greenish brown and the upper facets, along the top edge, a reddish yellow. Highlights are in white.

The background of the chasm, in the center foreground, is painted a dull charcoal black. Disappearing into it are the Gates of Hell, which are divided into square coffered panels — the coffering lozenge-shaped — and are painted in yellow and orange-yellow colors, as though brazen. Lying prone over one leaf of the gates is the dark figure of Hades, his feet tightly fettered. His arms are drawn across his back and his wrists are manacled. Around his neck is an iron collar connected to the manacle by a metal bar. Hades is clad only in a loin cloth, painted in white with shadows of folds in black, and shading in brown. The rest of the figure is treated monochromatically in burnt umber, deepened with black for the drawing and the accents, and lightened with white for the higher lights. Scattered profusely throughout the blackness of the abyss are pieces of iron ware, many identifiable as fittings for doors or gates: hinges, locks, keys, bolts, etc.

As elsewhere throughout the Parecclesion, the sky was first painted in charcoal black. When the covering whitewash was removed from the conch of the apse, a very startling green color was found lying over the black in certain areas of the sky. This green was concentrated principally in the right hand side, especially between the mandorla of Christ and the very edge of the rocky peaks at the right. At that stage in the work no other areas of sky background in the Parecclesion bore this color, even though much of the black elsewhere was exposed and visible. This was obviously not an obscuring medium, for it occurred only in the sky, yet this color could not have been that used by the painters of the frescoes, for it was entirely out of key with the painting itself, and out of character with what was visible elsewhere in the chapel. The green was most unpleasant in quality and vividness. In a few small patches of the sky of the Anastasis, however, a rather

brilliant blue was found thinly applied upon the black. In the left side of the conch, as was usually the case throughout the chapel, the black remained uncovered by any visible pigment.

To account for the presence of the green in limited areas of the sky, it is necessary to refer to conditions in other parts of the chapel. In the dome (see below) where no whitewashing had ever been done, the black background behind the figures of the angels between the ribs was overlain by a thin application of the same bright blue that was found in small patches in the conch. This blue overpaint has been identified as azurite, and there is no doubt that it was placed there by the painters themselves, and was not a later alteration. On removal of whitewash in the vaults and lunettes below the dome — areas which are being cleaned at present writing — the same green and the same blue appear in relatively small patches at scattered points upon the black of the sky; but, for the most part, the black is found uncovered by any pigment. Thus it can be said that originally the black backgrounds used for the sky throughout the chapel were overlaid by a thin washing of azurite. In some places, notably in the right side of the conch of the apse, conditions of humidity, possibly also affected by the whitewash, had produced a chemical change in the azurite causing it to revert to a stable malachite. In some places this reaction did not occur, and even though the azurite was covered, the pigment remained intact. For the most part, however, conditions have simply caused the azurite to disappear. Since the backgrounds were originally black covered with azurite — that is, blue and not green — and, since the green was so utterly disturbing and in such limited areas, all of the green has been removed, but where the azurite remains it is being carefully preserved.

Over the blue of the original background the inscriptions were applied in heavy white paint. In many instances, as in the inscriptions of the Anastasis, the white paint was stained through by the underlying azurite which had turned green, and it therefore bears a greenish tinge. This also explains why the originally white shepherd's crook held by Abel is now a pale green. In some inscriptions, especially in those where the white was laid on less thickly, tinges of blue, over which they were painted, show through.

Along the base of the painting (fig. 63), just above the cornice, is a red border about 12 cm. wide.

Edged with a white line and reduced in width to about 2.5 cm., the border turns to follow the upward curvature of the arch, and in two places in the border, along the base of the conch, there are small Byzantine restora-

tions of the plaster and paint, one at the far right corner and another near the center.

The composition of the Anastasis in the conch is framed by the ornamental band (19 cm. wide) upon the face of the conch which separates it from the arch of the bema (fig. 105). This ornament, bordered on both sides by red lines edged in white, is in the form of a complicated meander ribbon-pattern, painted on a black background. The ribbons, seen in perspective, are green, yellow, red, and gray. The standing edges of the ribbons are white. White pearls are systematically interspersed throughout the design.

CHRIST RAISING THE DAUGHTER OF JAIRUS ²⁵ (Figures 76–80)

Figures 76 and 77 illustrate previous and present conditions in the right side of the arch of the bema, in which was painted one of Christ's miracles of resurrection, the Raising of the Daughter of Jairus. Before cleaning began it was impossible to identify the subject with assurance although it was evident that Christ stood to the left of center, and the main lines of the bed and some of the architecture could be distinguished.

The painting, including its red borders at either side, averages 1.60 m. in width. The height, from the upper edge of the lost inscription to the cornice is 2.43 m. Placed in the center of the nearly symmetrical composition are the three principal figures: Christ, the Daughter, and Jairus. The group of six disciples at the left is balanced at the right by the Mother of the resurrected girl and two other women. Near symmetry is carried into the background by the use of two tall, narrow structures before which the groups of figures at the sides are depicted.

Christ ²⁶ (fig. 78), dressed in chiton and himation, stands to the left of center, and stoops slightly forward as He grasps the right wrist of the girl with His right hand. In His left hand He holds a white scroll. The chiton is visible at the shoulder, the right sleeve, and the hem. It is painted a solid deep blue-violet, and over this the middle tones and highlights are painted in light values of the same color. The folds are either left in the deep color of the ground or, here and there, darkened still further, for example, at the edge of the opening of the extended sleeve. At the right shoulder the *clavus* is painted over the deep violet in a dark earth red. Over this fine lines and some flat tones of greenish yellow lend the *clavus* a golden tonality.

²⁵ Mat. IX: 18, 23–25; Mark V: 22–24, 35–43; Luke VIII: 41, 42, 49–56.

²⁶ Height of Christ, 1.02 m. On removal of whitewash and yellow paint, it was found that a red stain covered the head of Christ and extended in a strip diagonally downward to cover the face of the young girl.

The himation gives the effect of blue; it was first painted solidly in charcoal black, and over this a light blue was sparingly used for the highlights. The blue was applied in bold brush strokes and in hatchings, which occasionally, as in the right thigh, achieve an almost solid effect in the center.

The nimbus is yellow, and no traces of gold leaf were found. As in the nimbus of Christ in the Anastasis, this halo also bears rough scratch marks to indicate the approximate shape and position of the cross which, however, must have been painted over the gold leaf for the scratched marks are very crude, and are not in the correct position. The nimbus is bordered by earth red and then by white.

The young girl is seated on her bed facing Christ. She is dressed in a red tunic which is similar in color and treatment to Eve's tunic in the Anastasis. The cuffs and arm bands were meant to indicate golden brocades. Draped over the lower parts of the body is a deep blue-violet robe. This seems to have been painted first in the same colors and manner as the chiton of Christ, and then differentiated from Christ's garment by means of considerable repainting, at the deep folds, in earth red pigment which added warmth to the tonality of the robe.

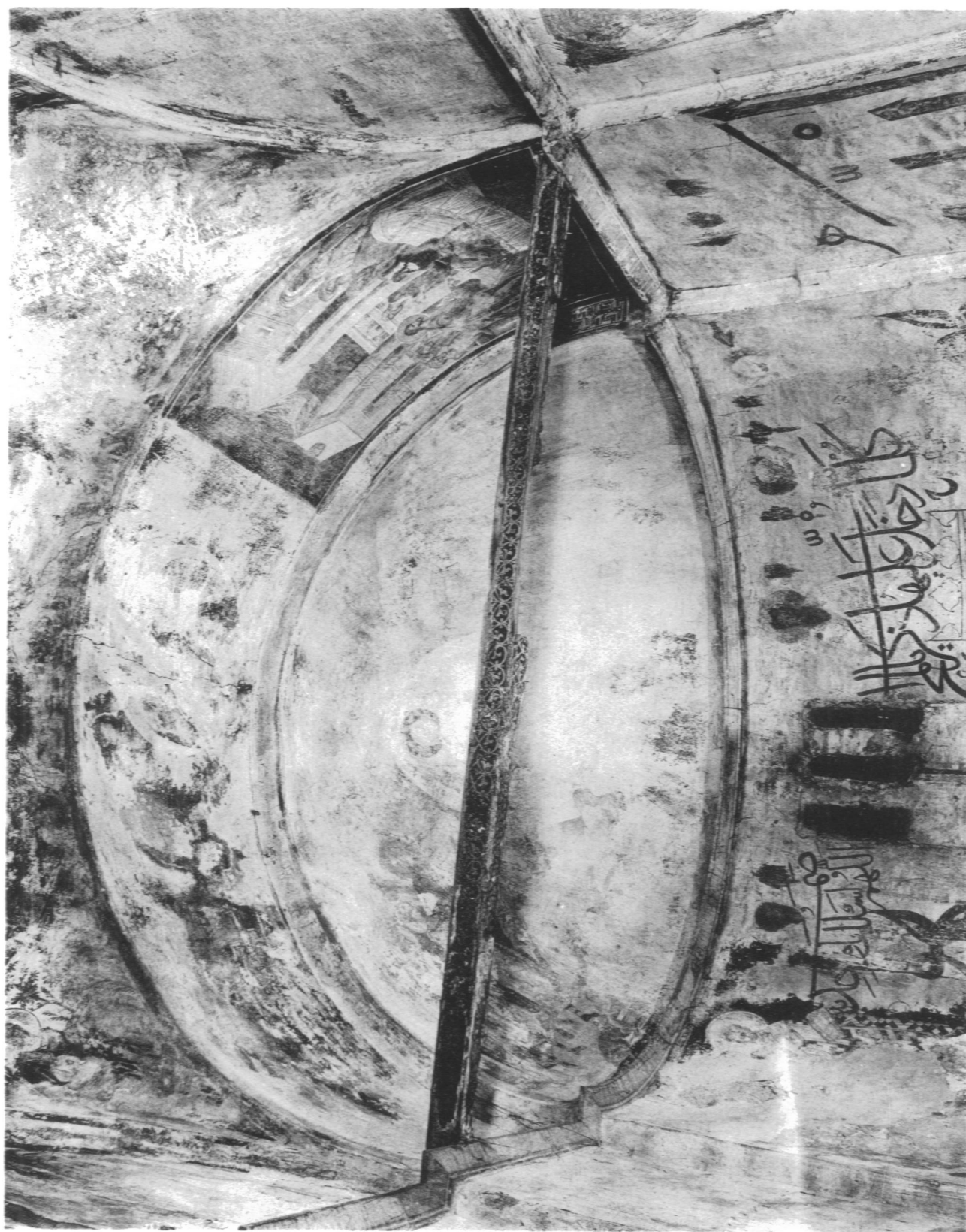
Over her head, and around her neck and shoulders the young girl wears a light blue hood of fine material. It seems to have been painted solidly in very light blue, and built up to the middle lights with the same color in an even lighter value. The highlights are not pure white, but slightly tinged with blue.

Jairus, who stands between his daughter and Christ, wears a tunic the light blue cuffs of which are the only visible parts. His outer garment is of a somewhat redder violet than is the chiton of Christ, or the robe draped over the lower parts of his daughter. The head cloth which falls over his shoulders and around his neck is of a slightly deeper blue than the girl's hood.

Six disciples are grouped at the left behind Christ (fig. 79). In all probability the three whose heads are seen in three-quarter view are Peter, James, and John, named in the accounts of Mark and Luke as being among those present. Only Peter, at the left, stands fully revealed. His chiton is blue, like all the disciples' chitons that are visible, and his himation is a dull greenish yellow, perhaps underpainted in terre verte. The deeper folds and much of the outline drawing are in reddish brown. The highlights are white and very prominent because, with the exception of the figure between him and Christ, his garments were the only ones in this painting to receive full highlighting. The disciple between Peter and Christ wears a green himation.



61. Kariye Camii. The Parecclesion. General view looking east. Before cleaning



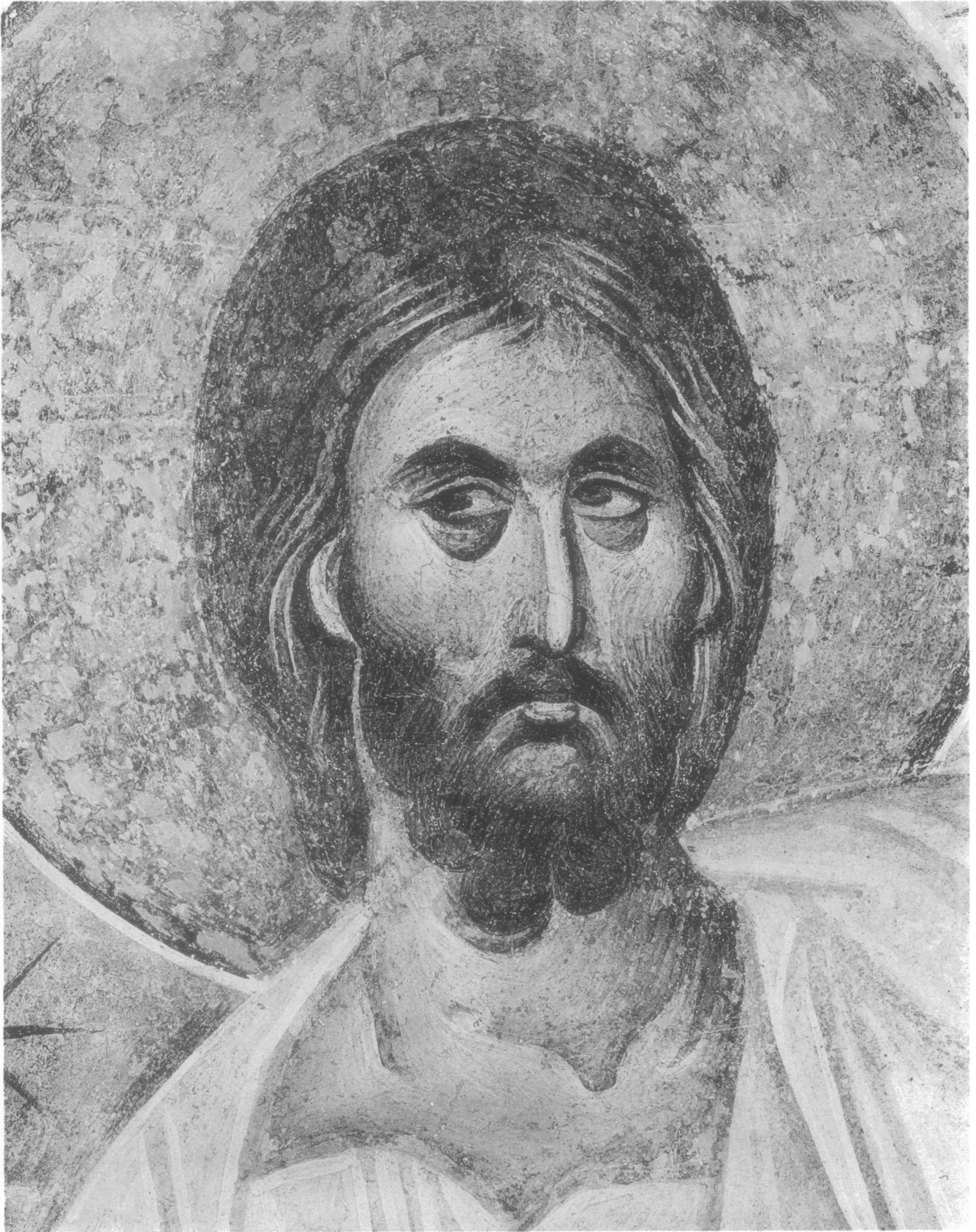
62. Vaults of the Apse. Preliminary cleaning at right



63. Vaults of the Apse. After cleaning



64. Anastasis. Center detail



65. Anastasis. Head of Christ



66. Anastasis. Adam



67. Anastasis. Eve

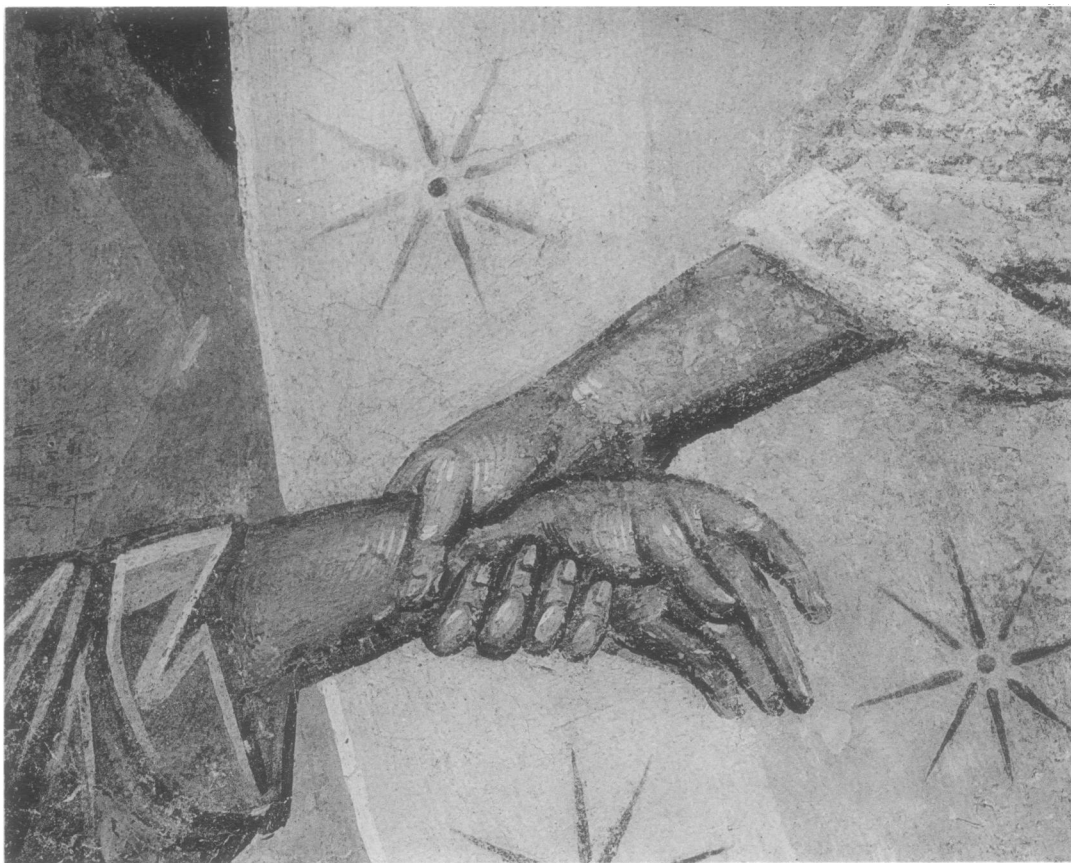


68. Head of Adam



69. Head of Eve

Anastasis



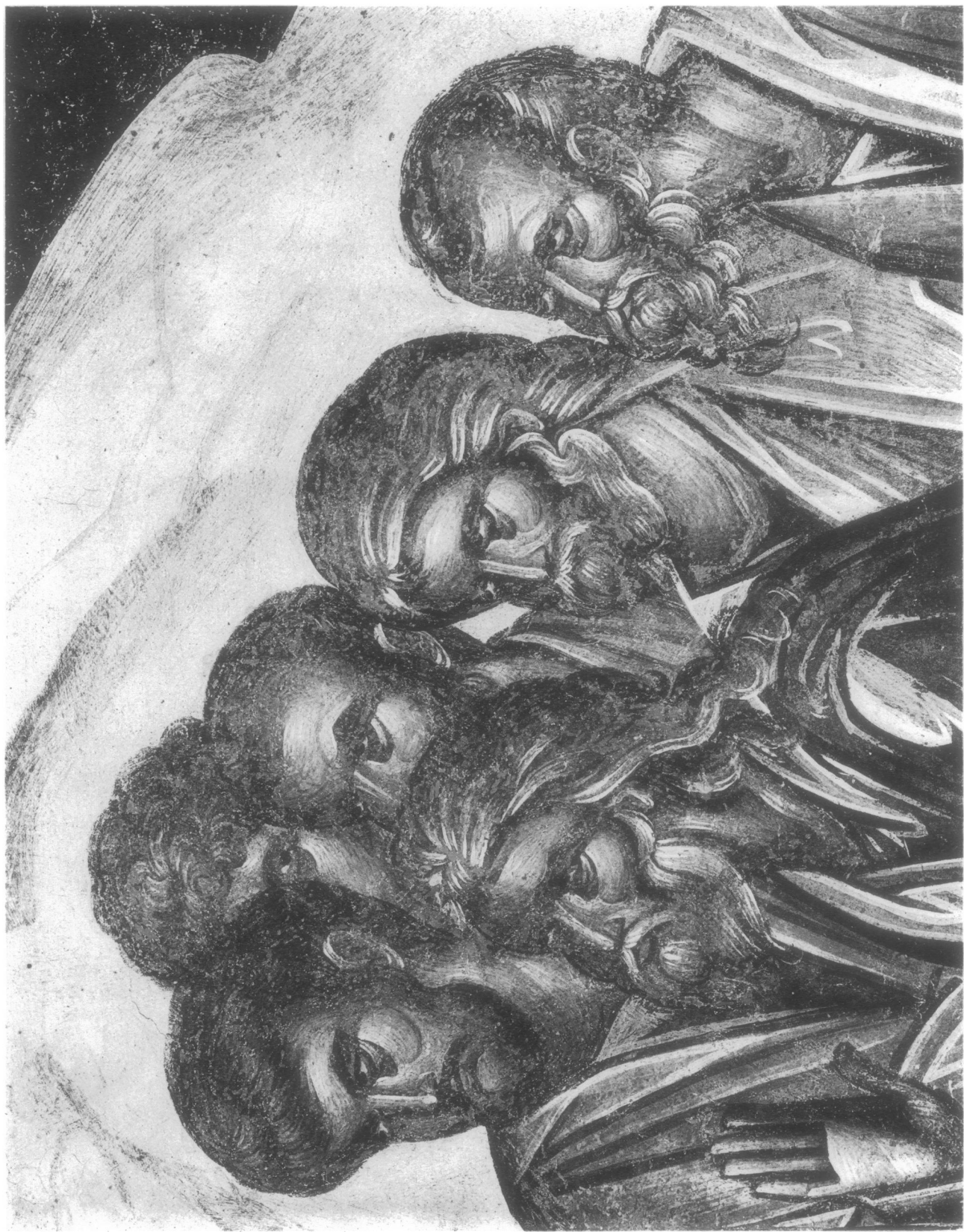
70. Hands of Christ and Adam



71. Hands of Christ and Eve
Anastasis



72. Anastasis. The Righteous at the right



73. Anastasis. Heads of the Righteous at the right



74. Anastasis. The Righteous at the left



75. Anastasis. Head of St. John the Baptist

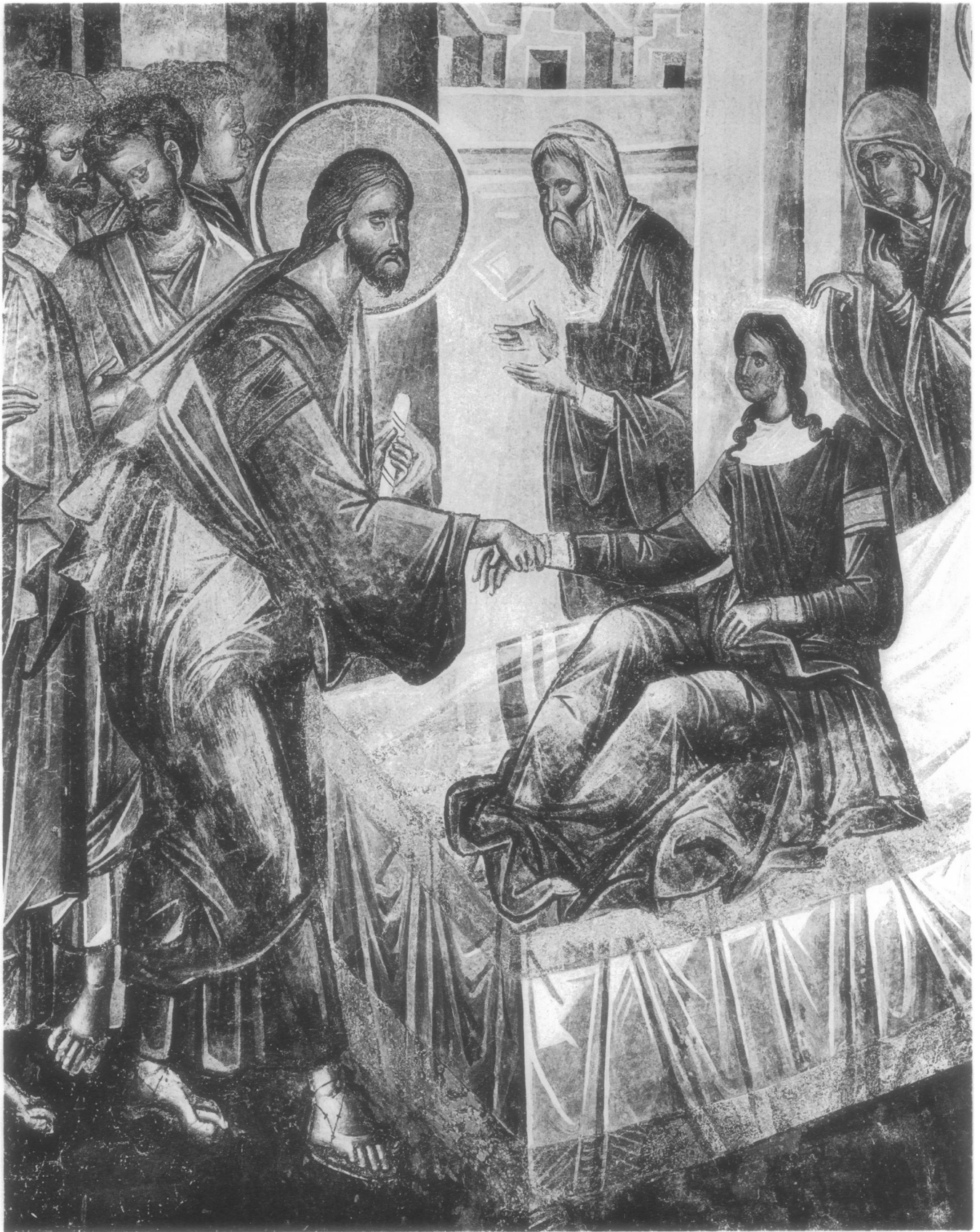


76. Before cleaning

Christ Raising the Daughter of Jairus



77. After cleaning



78. Christ Raising the Daughter of Jairus. Center detail



79. Heads of the Disciples

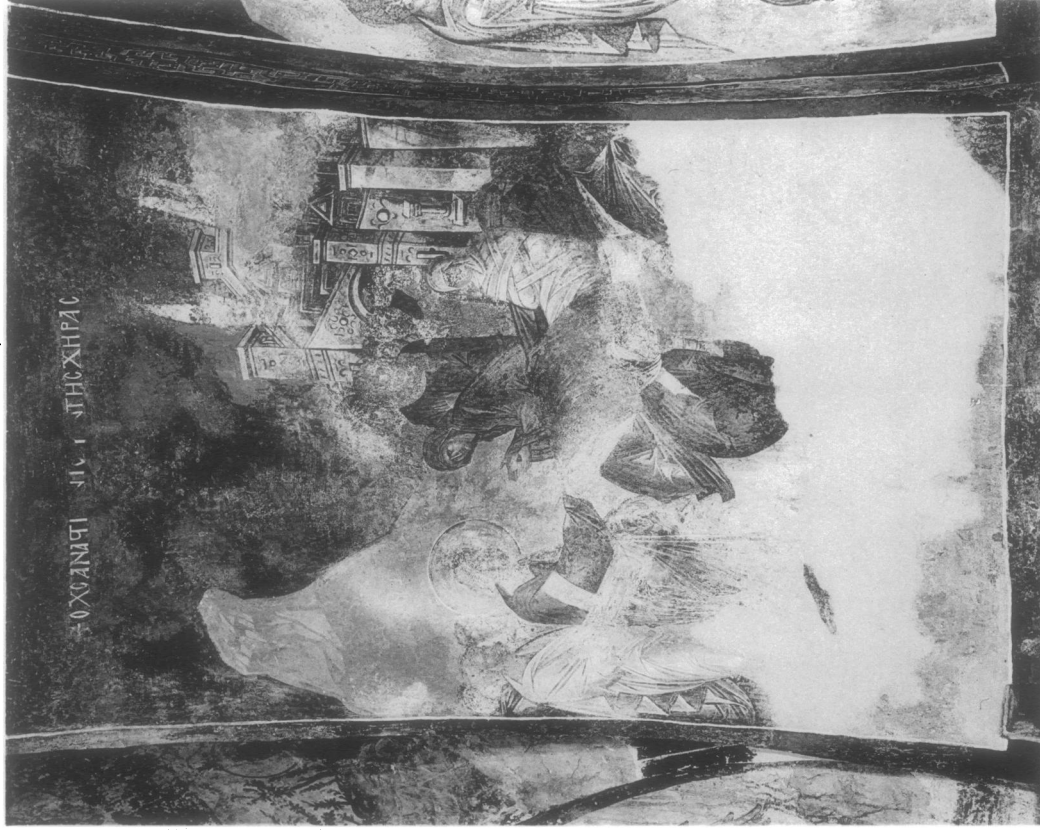


80. Heads of the Mourning Women

Christ Raising the Daughter of Jairus



81. Before cleaning



82. After cleaning

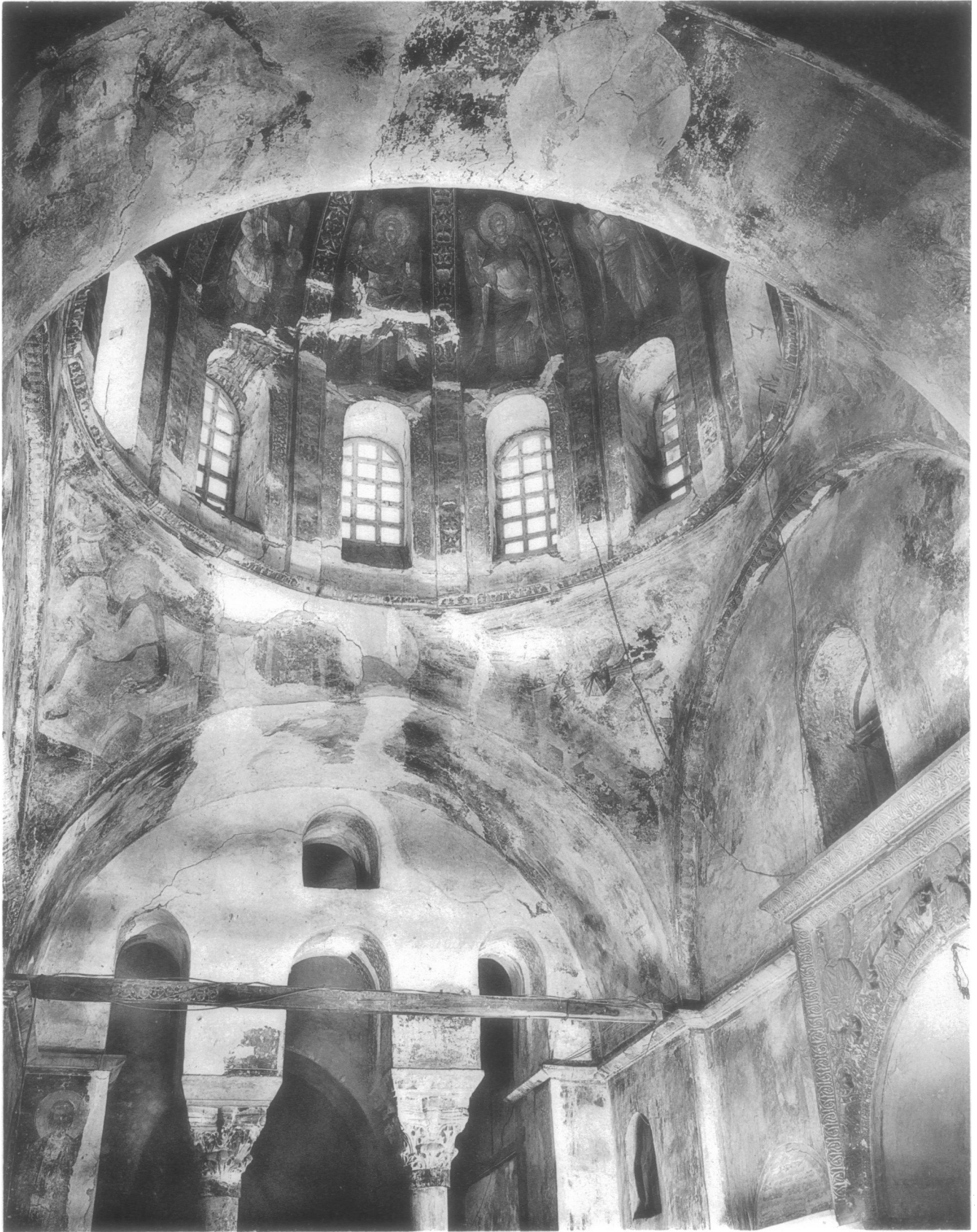
Christ Raising the Widow's Son



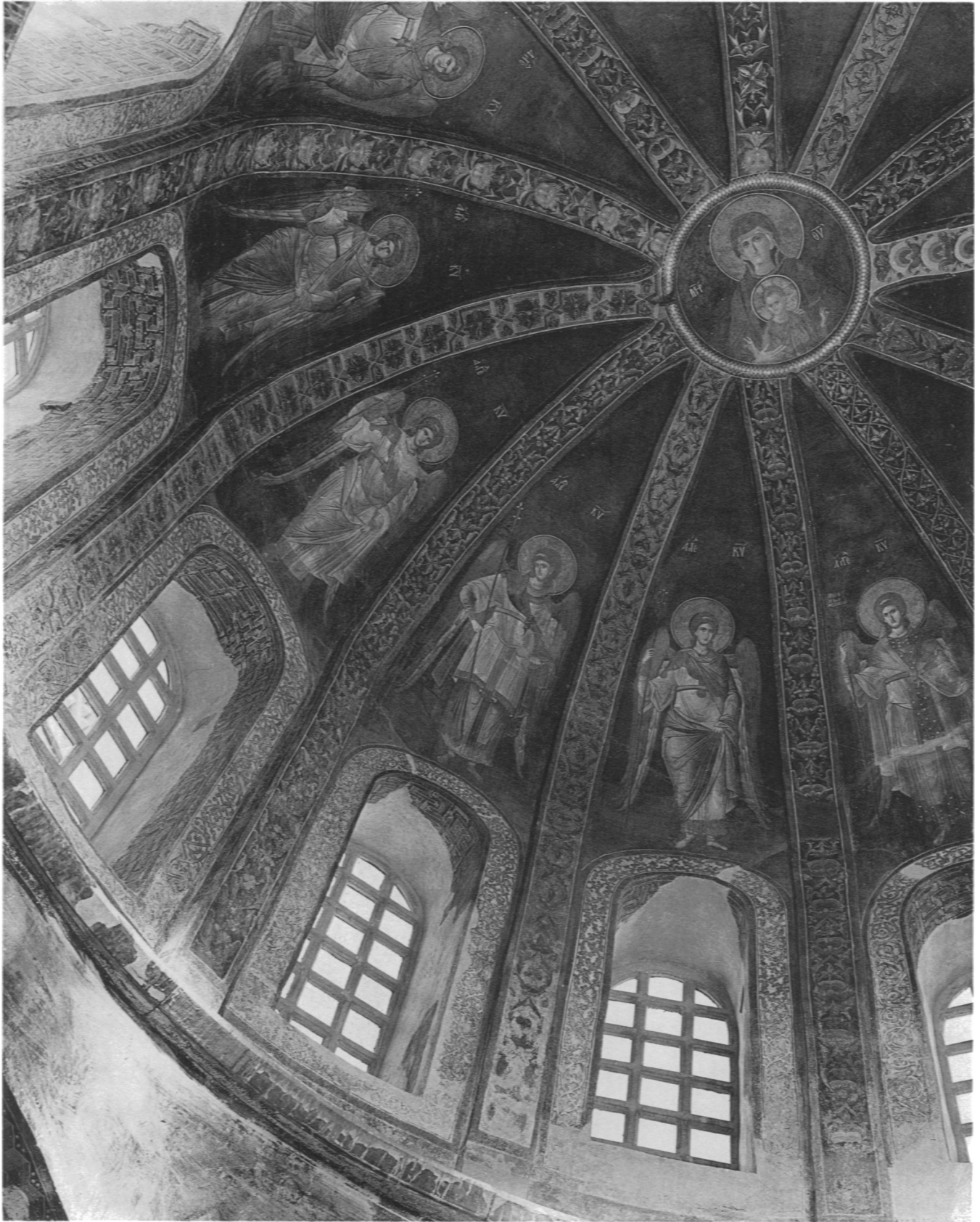
83. Christ Raising the Widow's Son. Center detail



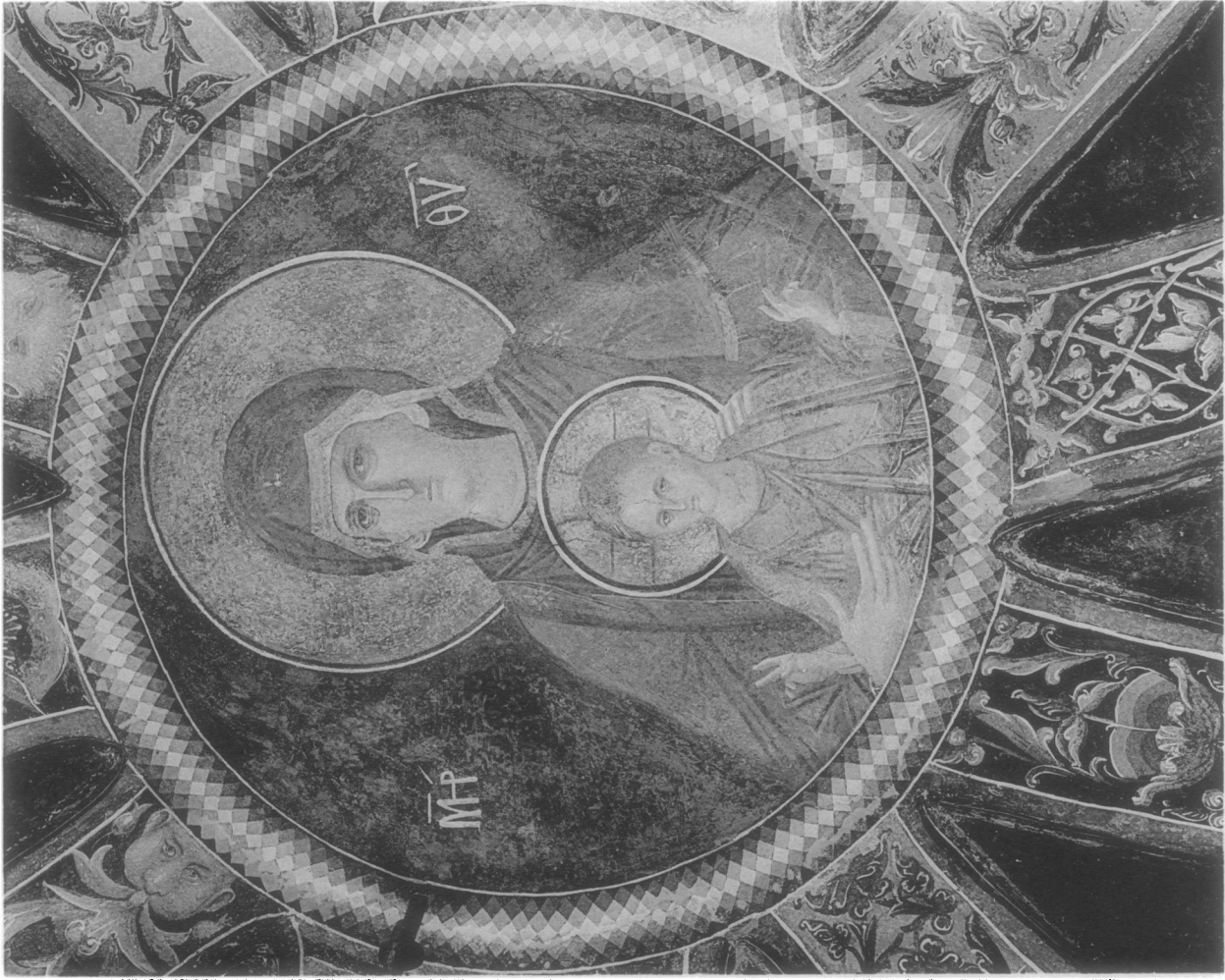
84. Archangel Michael



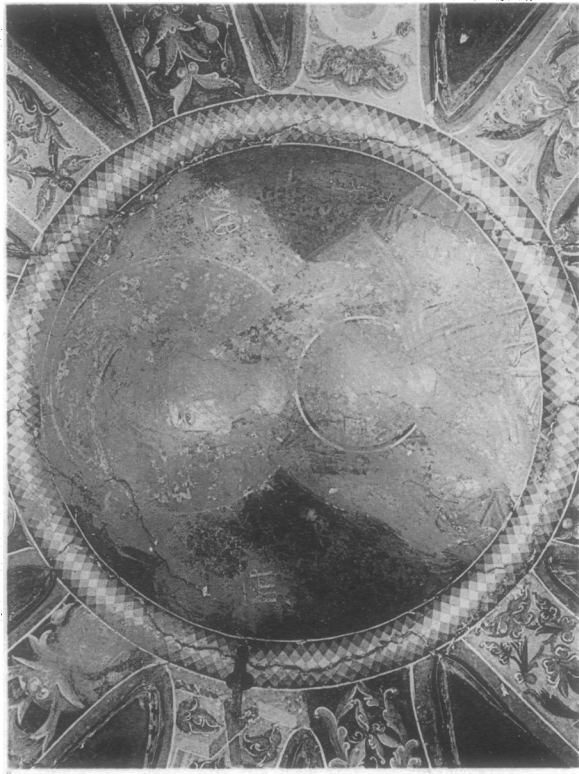
85. The Parecclesion. View into the Dome, from southeast. Before cleaning



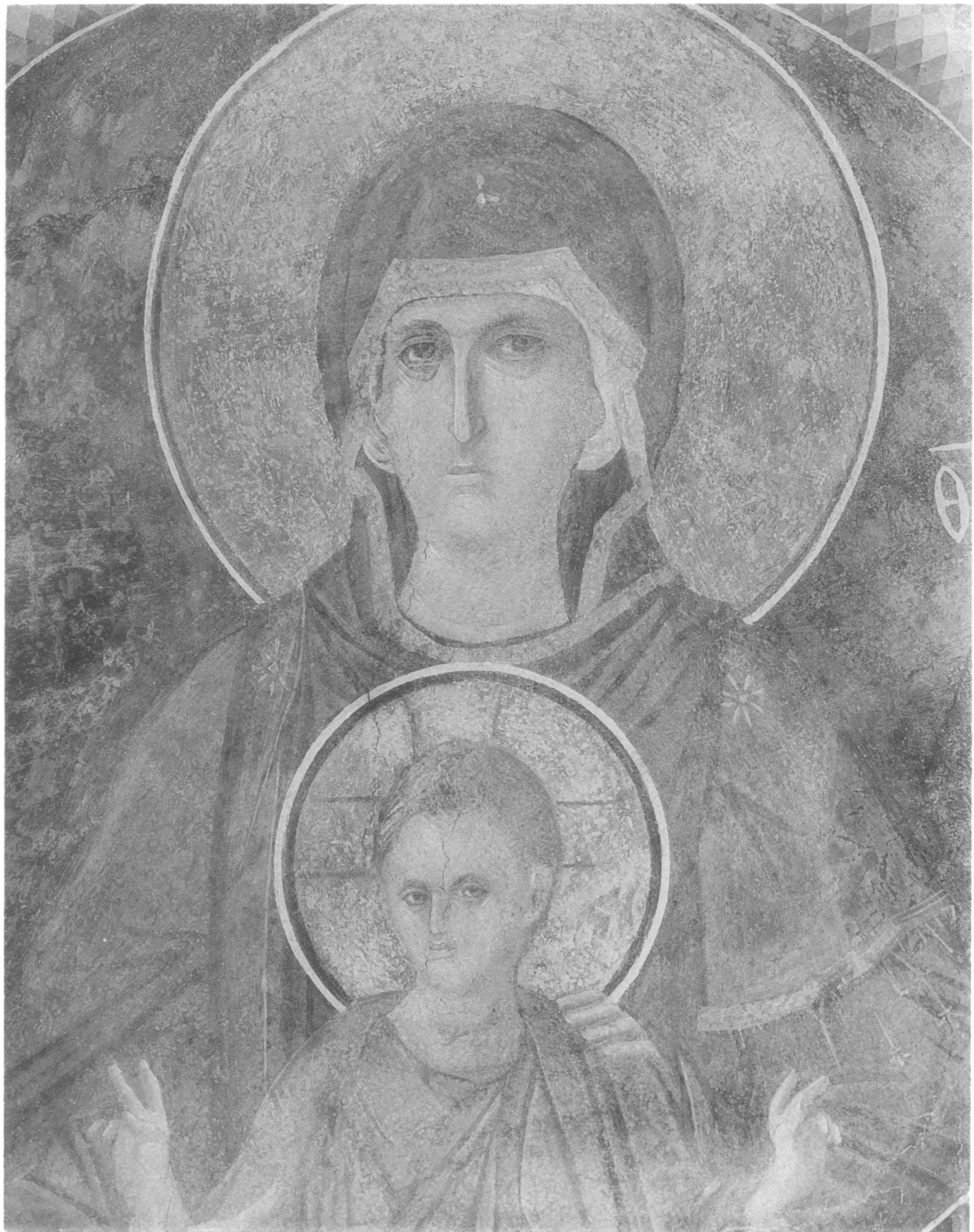
86. The Dome. Partial view. After cleaning



88. Medallion. After cleaning



87. Medallion. Before cleaning



89. The Dome. Medallion. Heads of the Mother of God and the Infant Christ



90. Angel No. 1



91. Angel No. 2

The Dome



92. Angel No. 3



93. Angel No. 4

The Dome



94. Angel No. 5



95. Angel No. 6

The Dome



96. Angel No. 7



97. Angel No. 8

The Dome



98. Angel No. 9



99. Angel No. 10

The Dome

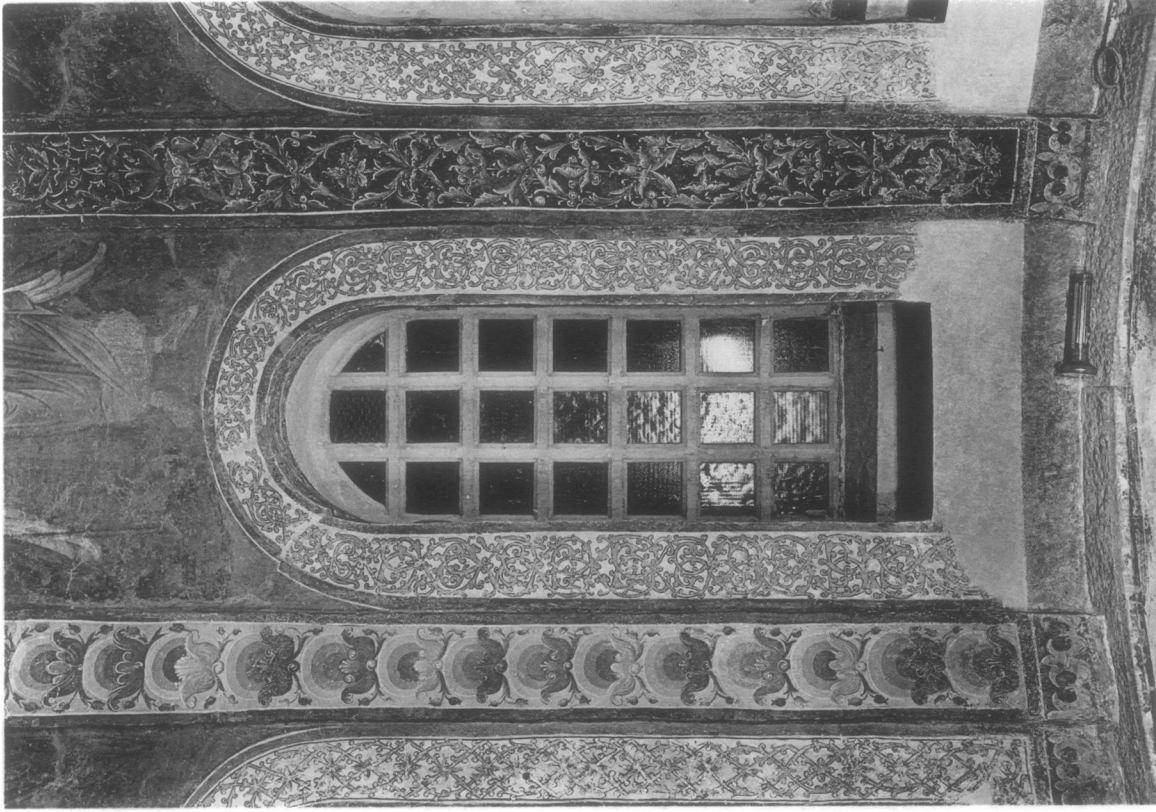


100. Angel No. 11



101. Angel No. 12

The Dome



102.

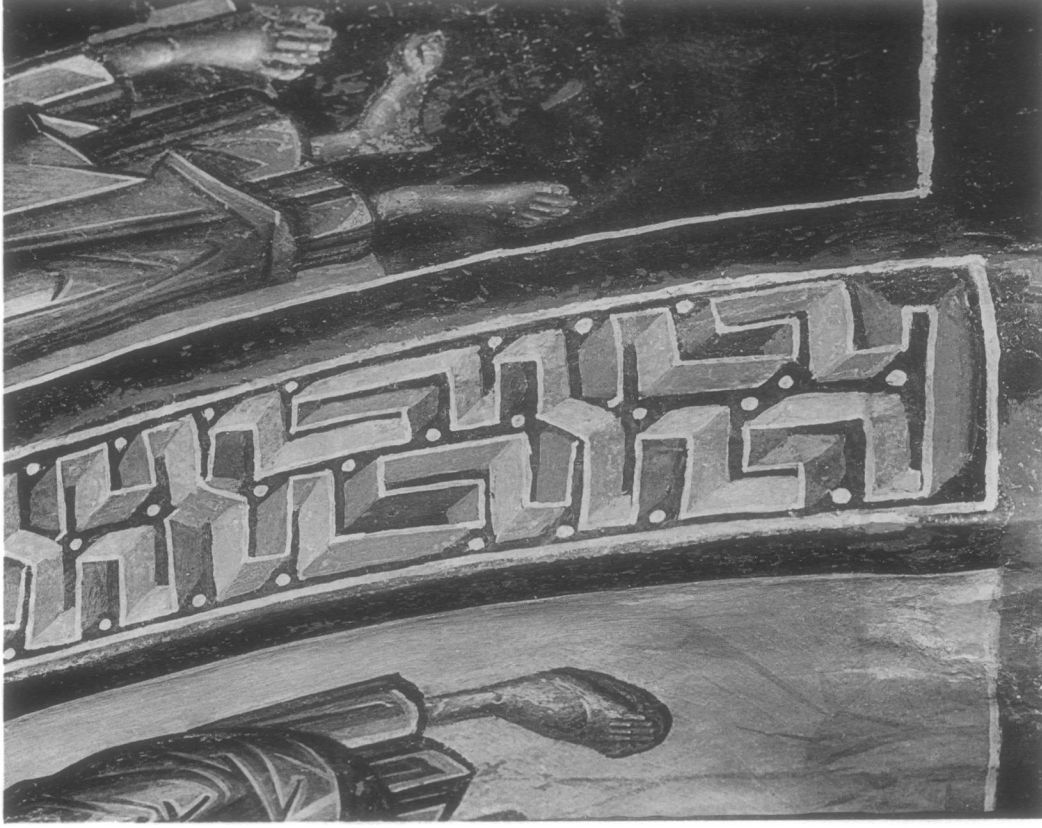


103.

Dome Windows



104. Drapery detail. Figure of Eve in the Anastasis



105. Ribbon meander ornament on the face of the conch

The only other himation visible is that of the figure at the right, drawn in profile, which is a deep blue-violet.

Stooping forward behind the girl is her mother (fig. 80) completely enveloped in dark green garments. The central one of the three women is clad in a light red-violet garment. The last figure to the right wears a dull gray-blue tunic, seen only below the waist. Her *maphorion* is a very interesting light blue, shot with yellow brown in the medium lights and reddish brown in the deeper folds.

The bed is a draped piece of furniture which slopes upward to the curved head. The red-violet drapery around the sides, strongly highlighted with white, hangs in folds and is bordered at the top and bottom by golden brocades painted in yellow and brown pigments that have not proved durable in this instance. On the bed is a mattress, cushioned at the head. Its color is yellow ochre with white highlights. Across the cushioned head and again near the foot are three bands of gray-blue.

The foreground is a zone of dark green about 35 cm. high. Above this, visible at the two sides, the background becomes yellow ochre until it is concealed by the figures and the bed. Rising behind the figures at each side are two tower-like structures, the one at the left flat-roofed and seemingly pierced on each side by rectangular openings. The color of this building is in general like that of Adam's sarcophagus, but considerably warmer in the reddish tones. It is set at an angle in perspective, with one face parallel to the picture plane. At the top, the back side of the building is indicated as though greater in width than the front, in the prevalent medieval manner of inverse perspective. In contrast, the building at the right is a gabled structure, and all its doors and windows are arcuated. The walls are yellow ochre with white highlights, and its shaded faces are darkened by the addition of brown. The roof is tiled and colored a blue-gray with white and light gray highlights. The gabled front is carried upon consoles at the springing line of the arch, and the consoles too are of blue-gray and white. A red drapery with a golden embroidered band is hung in a swag between the two buildings. At a lower level between the buildings an elaborately crenellated wall fills in the background.

As was the case throughout the Parecclesion, the basis for the sky was charcoal black. No traces of the azurite overpainting were found to have survived.

A short distance above the roofs of the buildings two guide lines about 4 cm. apart are scratched into the plaster. They extend almost the width of the arch and indicate the position and approximate length of the titulus for the scene below. Here and there a few individual letters, or parts of letters,

left faint traces of white upon the black paint, and a very few isolated letters can be seen under ultra violet light. But the inscription is so nearly lost that it cannot be reconstructed upon the evidence of visible remains.

CHRIST RAISING THE WIDOW'S SON ²⁷ (Figures 81–83)

The scene of the Raising of the Widow's Son is illustrated in figure 81 in the condition in which it was found. The subject was identifiable for the key words of the inscription were still legible. Obviously in a bad state of preservation, nevertheless Christ and one of His disciples could be seen at the left, and something of the bier, its bearers, the Widow, and the city were distinguishable on the right. Across the bottom of the scene it was evident that a great area of original plaster was lost, and had been crudely replaced by a patch. Its cleaning (fig. 82) has added somewhat to the details of the composition, and greatly enhanced the brilliance of color of the original paint. The average width of the scene is 1.57 m., and its height from the top of the inscription to the cornice is 2.37 m.

Christ is dressed as He was in the pendant scene in a blue himation and a blue-violet chiton. The latter, however, is considerably redder than its counterpart in the Raising of the Daughter of Jairus. The greatest losses of paint are in the blue of the himation and in the head and hands.

Behind Christ at least three of His disciples were represented. Judging from what is visible, all wore blue chitons. The himation of the figure in the forefront was yellow and that of the disciple behind him was light red-violet.

The Son (fig. 83), prepared for burial, is wrapped in a light red-violet shroud and bound with strips of the same material. The face is almost entirely lost.

The bier was covered with a red cloth, and across the lower part, over the legs of the youth, there was a green robe. Three of the four bearers are at least partially visible. Of the bearer who supports the bier at the foot in the rear only the lower parts are visible. His garment is like Christ's chiton in color. His companion at the front is garbed in earth red, and wears a blue head cloth. The third bearer, almost completely lost at the far right, wore a blue garment.

Between Christ and the resurrected Son is the Widow, garbed in a very deep blue-violet *maphorion*, comparable in color to the chiton of Christ in the Jairus scene. By some curious circumstance her face (fig. 83) has withstood the conditions that caused the almost complete loss of the others. This might be attributable to the fact that the pigments employed in the

²⁷ Luke VII: 11–15.

painting of her face were rather different from others found thus far, being unusually dark in color.

Behind these figures a crowd of mourners is emerging from the gate of the town. The colors that have survived are mainly red and green. The figure behind the widow wears a red garment with a green collar, another reverses the color arrangement.

The mountain peak at the left is treated like the peak in the left side of the Anastasis, but with no white highlights and no warm brown in the shadows of the rocky facets.

At the right is the town of Nain within its enclosing walls. The walls are turreted and painted in a light blue-violet. The houses are for the most part gabled, and some of the roofs are tiled in blue-gray, others in red, while their walls are mainly greenish brown. Originally three cypress trees rose from within the walls, but these were painted out and replaced by two deciduous trees. Only a few faint traces of the foliage of these substitutions are extant.

The condition of the inscription raised questions of restoration policy. White paint, though thin and badly discolored, still adhered in some of the letters at the beginning of the inscription, that is to say, in the small cross, the *chi*, *sigma*, *alpha*, and *nu* (see fig. 81). But even in its untouched state the letters of $\tau\eta\varsigma \chi\eta\rho\acute{\alpha}\varsigma$ at the end were perfectly legible as negatives. Here, the white paint had adhered long after the whitewash was applied and after the black paint of the background around the letters had suffered damage. The black beneath them had, however, been protected. Hence, when the white paint of the letters did flake off the characters stood out as negatives, and were clearly legible amidst the surrounding gray and white of damaged black paint and traces of whitewash. Between the two ends of the inscription similar conditions were found here and there, and certain other letters or parts of letters were distinguishable. Obviously, if the inscription were left in such a state the cleaning would have caused its complete loss, or the lack of contrast with the cleaned areas around it would have rendered the inscription illegible at any distance. It was therefore decided to repaint those letters and parts of letters that could be clearly established.

THE ARCHANGEL MICHAEL (Figure 84)

At the top of the arch of the bema, between the two scenes of resurrection, is a large medallion containing the bust of the Archangel Michael. Its diameter measures 1.21 m. Generally speaking the right half of the figure is in relatively good condition, whereas the left half has lost a great deal of its paint.

St. Michael is depicted wearing chiton and himation, and bearing a staff in his right hand and an orb in his left. The chiton, which was exposed only over his right shoulder and breast, has lost all of its paint save a small patch of the sleeve near the lower left border of the medallion, where rather thin traces of yellow paint remain. Over the shoulder of the garment is a black *clavus*. The himation, worn over the rest of the body, is rather well preserved. It is shown rising from the back of the figure to fall over the left shoulder in a series of broad folds, and it appears again wrapped around the waist as a sash. It is painted a red-violet, shot here and there with light blue, especially in the half lights where the blue appears both as solid painting and as hatching. The highlighting is done in very pale blue and in white.

The face and neck are well preserved on the right side, and the major losses, such as those of the neck and chin, are mainly on the left. The features are elegantly drawn and beautifully colored and modelled. The hair, which has suffered especially, is rendered in a series of curls. Its colors were yellow, greenish yellow, and deep brown. Around the head was a blue fillet, tied at the back of the head, and, except at the center, covered by the hair. One of the two ends of the ribbon remains in the field of the nimbus at the right. There is very little trace of the other end.

The nimbus is yellow, bordered by deep brown and by white. No trace of gold leaf was found.

The wings have lost almost all of their overpainting, and no details of feathers remain. What is now visible is, principally, the underpainting in a rather dark greenish brown.

In his right hand, of which only some of the black preliminary outline drawing remains, St. Michael held a staff. Where it passed over the chiton almost all trace of it is lost. It is faintly visible as it passes through a short space of the background between his right shoulder and the nimbus. Then it disappears behind the nimbus, curiously enough, and emerges again near the top of the medallion. The head of the staff, which is spool shaped, is studded around the edges with pearls. The color now visible in the staff is reddish brown. In the palm of his left hand the archangel balances an orb. It is painted in grays, and was rendered semi-transparent by the reflection of some of the drapery folds behind it. On the orb are the letters *chi*, above, and *delta* and *kappa*, below. A very small cross stands upon the top edge of the orb.

The medallion itself is painted in three zones, each in a different value of yellow-pink, the darkest at the center. The perimeter of the medallion is edged with white.

The inscriptions on each side which identify the archangel as Michael were found clearly preserved at the right, more dimly at the left where they have been somewhat strengthened.

THE PAINTINGS IN THE DOME (Figures 85–103)

The western bay of the Parecclesion is covered to its full width by a dome about 4.70 m. in diameter. The condition of the dome before restoration was begun is illustrated in figure 85. The dome (fig. 86) is raised upon a high drum in which there are twelve windows; between them rise the twelve ribs which converge at the summit in a medallion about 1.10 m. in diameter. The painting of the medallion represents a bust of the Mother of God and the infant Christ framed by a rainbow border. In the spaces between the ribs, above the windows, there are angels inscribed as Angels of the Lord. The ribs are brilliantly ornamented in a variety of motifs, patterns, and colors, no two alike. The faces of the window openings are framed by ornament (figs. 102, 103) that, in its character, stands in marked contrast to the other ornaments of the dome. The reveals of the windows are decorated in still another manner. Around the base, resting upon the cornice, is a continuous ornamental band, hardly visible from below, which is painted in a running fleur-de-lis motif in gray and white upon a black background.

An illustration of the extent to which the medallion had been covered with yellow paint ²⁸ is found in figure 87, and the present condition of the medallion is shown in figures 88 and 89.

The Mother of God is clad in chiton and *maphorion*, both painted in deep blue-violet. The latter garment covers the head, and is trimmed at its edge around the face and neck by a narrow yellow border in imitation of gold which may even have been gilded though no surviving trace of gold leaf was found. The border appears again on the *maphorion* where it drapes over the Virgin's left shoulder. Here it is fringed in yellow. At each shoulder is a yellow eight-pointed star with a dot at the center. These probably had been gilded, for a third star at the center of the forehead retains its gilding in two of its points and its central dot, the only parts of the star that have survived. Over her head beneath the *maphorion* the Virgin wears a very light blue cap the edges of which frame her face and cover her ears. Her nimbus, now existing only in yellow paint and mordant, was originally gilded. It is trimmed in narrow borders of deep violet and white.

Because of the effects of the covering paint upon the particular pigments employed in the painting of her face (fig. 89), very little of the modelling

²⁸ The previous condition of the paintings of the dome and their cleaning and repair have been briefly described above, pp. 258, 262–264.

remained in the Virgin's left cheek or in her neck on the same side. These areas were inpainted solely to the extent, and with the purpose, of giving the losses a general tone which would blend with the original paint still retained in other parts of the face. The Virgin's right eye was found completely intact. Her left eye, however, while clearly retaining the essential traces of the drawing, had lost some detail and color.

The Christ child was dressed in gold chiton and himation, and, unlike other brocadings among the paintings, much of the yellow painting was actually gilded. A considerable amount of gilding still remains in a strip across the bottom of the medallion between the hands. The hair of the Child was primarily rendered in light brown. The hair on His left, where the photograph shows only general tones, lacking all detail, required considerable inpainting. The sharp triangle of hair on His right side was completely preserved. The nose, the mouth, and the left eye were found in quite good condition.

The drawing of the parts in all the hands was clearly traceable, but loss of color had caused loss of sharp definition, and in the inpainting no attempt was made to restore the sharpness of detail, but again, simply to tone the areas where color was lost.

The nimbus of Christ had been gilded, and the lines of the cross are in part still present in a deep brown paint. Christ's nimbus was edged like that of the Mother.

The frame around the medallion (fig. 88), beautifully executed and in excellent state of preservation, achieves a remarkable prismatic surface effect and prominence of modelling. It is constructed in five concentric zones of interlocking diamond shapes, with half diamonds along the two edges. Within and without, the frame is bordered with white lines. Beginning from the inner edge of the border and progressing outward, the colors of the succeeding zones are as follows:

- | | |
|-------------------------------------|--------------------------------------|
| 1. A very deep violet (half zone). | 4. White at the center. |
| 2. Deep earth red. | 5. A light value of green. |
| 3. A lighter value of the same red. | 6. A darker value of the same green. |
| 7. A very deep violet as in no. 1. | |

The twelve Angels of the Lord (figs. 90-101) stand in a variety of poses in a zone of green. Their brilliantly colored court costumes are relieved against a blue background painted in azurite upon a black ground. The blue overpainting is more extensively preserved here than in any other part of the Parecclesion because the dome, above the cornice, has never been whitewashed.

Before detailing the colors of the garments of the Angels, the features

which they have in common should first be described. Each angel is attired in three garments: a long tight-sleeved tunic as the under garment; a chlamys as the outer; and, between these two garments, seven of the angels wear a short tunic, gathered at the waist, and four wear a *divitission*, also gathered at the waist. In one instance (no. 4) the lower part of the middle garment is covered and it cannot be identified. Over the short tunic or the *divitission* a sash is worn across the chest and under the arms. Within these categories there are numerous variations in the detail of the garments and in the manner in which they are worn. Some of the short tunics, for example, have short open sleeves, like the *divitission*, in others the sleeve is short but closed. Still other middle garments have no sleeves at all. Some have much larger openings at the neck than others. Within each category the nature and extent of the ornaments at the collars and hems vary greatly. In one instance (no. 3) the sleeveless short tunic was not pinned or buttoned at the right shoulder, but had slipped down across the chest. The manner in which the chlamys is worn varies also. It is sometimes pinned, sometimes loosely knotted, and in one instance it has slipped around to cover the back (no. 11).

Each angel carries a brown staff in his right hand. The heads of all but one of the staffs are studded with five pearls. The exception (no. 1) is a small inscribed labarum reading ἄγιος, ἄγιος, ἄγιος. Four of the angels (nos. 1, 6, 7, 11) hold orbs in their left hands. Pertinent details of the orbs will be given below among the color notes for the garments. The outer parts of all the wings are brownish green with relatively few details in the treatment of feathers. The inner parts are light blues and grays and much more detailed. The nimbi were painted yellow and overlaid with gold leaf. Traces of the gold were found in every one of the haloes, and in some it is retained to a considerable extent. The haloes are bordered in deep violet and in white. Each angel wears bound around his head a light blue fillet, visible only at the center and at the two ends which are relieved against the nimbus at each side of the head. As covering for their feet and legs they wear what appear to be buskins. Most of these are red ornamented with brocade, but some are entirely brocade.

The angels are illustrated in clockwise sequence beginning with the angel who stands on the axis in the eastern segment of the dome. The color notes for the costumes follow the order of the illustrations:

No. 1 (fig. 90)

Chlamys: green with yellow stripe, knotted loosely at the center.

Short tunic: light violet with a blue border at the hem; a short open sleeve; gold brocade down the front set with red and green gems and pearls.

Sash across the chest: gold.

Tunic: blue, visible at the sleeve and below the short tunic; gold cuffs and hem, latter set with pearls and gems.

Orb: transparent crystal, surmounted by a small gold cross; inscribed with X.

No. 2 (fig. 91)

Chlamys: deep blue-violet with gold tablion.

Divitission: very light yellow with overtones of green; short open sleeve; gold brocade at the hem and on the wide collar extending over the shoulder.

Sash: dark blue.

Tunic: blue, visible only at the sleeve; gold cuff.

No. 3 (fig. 92)

Chlamys: green with gold stripe.

Short tunic: light red-violet with a gold brocade stripe; sleeveless; slipped down across the chest because it was not buttoned at the right shoulder; gold border at the hem with a short fringe.

Tunic: earth red; gold collar, cuffs and hem.

No. 4 (fig. 93)

Chlamys: deep red-violet loosely knotted; gold tablion visible under the arm.

Short tunic (or divitission?): green; gold collar with a rather large opening at the neck; short open sleeve.

Sash: light blue.

Tunic: blue; gold cuff, collar and hem.

No. 5 (fig. 94)

Chlamys: blue (lapis lazuli) field, studded with gold fleurs-de-lis; gold tablion. Fastened near right shoulder.

Short tunic: light red-violet; gold collar with large opening at the neck revealing red of tunic beneath; narrow hem of gold; short open sleeve.

Sash: light blue, knotted in center.

Tunic: earth red; gold cuff, neck opening and hem.

No. 6 (fig. 95)

Chlamys: earth red, fastened at right shoulder; gold tablion.

Short tunic: light green; white hem with blue figures; the two ends of the narrow green girdle that gathers the garment at the waist are exposed and terminate in red tassels; sleeveless and pinned well down over the right shoulder.

Sash: gold.

Tunic: light blue; wide collar and hem in gold.

Orb: translucent, painted light blueish gray; inscribed with yellow X framed at top and bottom and two sides by yellow bars.

No. 7 (fig. 96)

Chlamys: green, knotted loosely over his left side; blue tablion.

Short tunic: red-violet with light red-violet hem; gold collar; short closed sleeve with gold hem.

Tunic: earth red; gold cuff, hem and collar.

Orb: like that of no. 6, but giving an effect of greater translucence.

No. 8 (fig. 97)

Chlamys: deep blue-violet, knotted loosely in front; gold tablion.

Short tunic: light greenish yellow, with hem of lighter value, white highlights; gold collar and hem of sleeve; short closed sleeve.

Sash: blue.

Tunic: deep blue; gold cuff, hem and narrow collar.

No. 9 (fig. 98)

Chlamys: deep blue, pinned at right shoulder; gold tablion.

Divitission: deep yellow; gold collar and hem; short open sleeve.

Sash: red.

Tunic: earth red, visible only at sleeve; gold cuff.

No. 10 (fig. 99)

Chlamys: light green, pinned at right shoulder; gold tablion.

Divitission: light red-violet; gold collar and hem; short open sleeve.

Sash: light blue.

Tunic: light blue; gold cuff.

No. 11 (fig. 100)

Chlamys: earth red, knotted and slipped around over the back.

Short tunic: light green; large opening at neck; gold collar and narrow gold hem; short open sleeve.

Sash: light blue.

Tunic: deep blue-violet shot with light blue; narrow gold collar and cuffs, and wide gold hem.

Orb: transparent crystal surmounted by small gold cross; inscribed X like no. 1.

No. 12 (fig. 101)

Chlamys: deep blue-violet shot with light blue, pinned at right shoulder; gold tablion.

Divitission: like that of no. 2 except for brown overtones.

Sash: blue.

Tunic: light blue, seen only at sleeve; gold cuff.

Even more varied than the angels, and almost as colorful, are the ornaments of the twelve ribs. These constitute, so to speak, a repertory of Byzantine ornament, a demonstration of versatility and invention in their avoidance of repetition. Even within a single rib, which may appear to be composed of a set of rhythmically repeated motifs, the painters did not hold themselves to strict mechanical repetition but altered the forms slightly from unit to unit, varied the rhythm of the color repeats, or rearranged the coloring of different parts of the plant or flower forms which constitute the motif. It is nowhere evident that stencils were employed.

The plastering and painting of the dome was done in two parts. First, the upper part, above the tops of the windows, was plastered and painted, then the scaffoldings seem to have been lowered and the zone of the windows, including the ribs, was executed. In some instances the colors in which a rib was continued in its lower parts fail to match exactly those above, or, again, some subtle change occurs in the rhythm of the repeats.

The motifs employed fall into several categories. By far the most prevalent are those whose composition was inspired by plant and flower forms. Others intersperse flower forms in an interlacing of vines, or within the square frames provided by a rectangular interlacing of ribbons. Still another motif combines masks with forms derived from plants and flowers. Three ribs employ variants of scale patterns which are combined with foliate or floral forms. The forms that are based upon plant life are, in a sense, abstractions, for no individual plant or flower is clearly recognizable and, indeed, it is often difficult to determine whether it is a leaf or a flower that is the source of inspiration of a given form.

The backgrounds against which these motifs are relieved are either black, black overpainted with azurite, yellow, or, in one case, a light gray. At each side of the ornament white lines border the edge of the red bands that turn the edges of the ribs. In the narrow return faces of the ribs, between the red border and the main surface of the dome, is a narrow band painted in a running pattern of fleurs-de-lis in yellow upon a black ground.

The following notes give the principal colors employed in each of the twelve ribs. The numbers correspond to the rib seen at the right in each of the twelve illustrations of the angels (figs. 90–101):

No. 1 (fig. 90)

Background: black with some azurite overlaid. The lighter of the two intertwining vines: yellow and deep violet. The darker vine: green. Flower forms: red, yellow and green.

No. 2 (fig. 91)

Background: yellow. Plant forms: blue, red, and green.

No. 3 (fig. 92)

Background: light gray. Plant forms: green, red, blue, deep blue-violet, and occasionally yellow. Although in general there is a tendency to repeat in groups of three, the repeats are not consistent. The large scales between the plant forms are painted in three concentric zones, and the colors within each scale are three different values of one color, the deepest at the center, the lightest at the outside. The scales are in red, a color like raw sienna, and green.

No. 4 (fig. 93)

Background: black. Leaf forms: mostly red and green, occasionally blue. The greens tend to be shaded with blue.

No. 5 (fig. 94)

Background: yellow. Plant forms: colored as in no. 2 but the forms are different.

No. 6 (fig. 95)

Background: black overpainted with azurite. Plant forms: red, green, yellow. Note that this rib begins at the top with a mask like those of rib no. 8.

No. 7 (fig. 96)

Background: black. Plant forms: red and green. Scales: two-lobed, and each is represented in either three or four values of a single color. The scales are repeated in series of fours in this sequence: green, red, yellow, red.

No. 8 (fig. 97)

Background: black overlaid in azurite. Masks are connected by plant forms that issue from their mouths. Masks: yellow. Plant forms: green, red, and blue. The thoroughness with which all forms of living creatures were painted out is illustrated by the fact that all the masks, including the single one at the top of rib no. 6, were obscured by yellow paint.

No. 9 (fig. 98)

Background: yellow. Two ribbons run the length of the rib and cross one another to form the alternate sides of squares. Seen in perspective, one ribbon is light blue on one side and light green on the reverse. The other ribbon is red on one side and light green on the reverse. Flower forms in center of squares: some parts in red, others in green or in blue.

No. 10 (fig. 99)

Background: black. The pattern is similar to but not exactly like that of rib no. 4 whose motifs are at a larger scale. Plant forms: red, green, yellow, and, to a lesser extent, blue.

No. 11 (fig. 100)

Background: yellow. Plant forms: red, green, blue.

No. 12 (fig. 101)

Background: black. Motif is similar to but not a repetition of that on rib no. 7. Double-lobed scale pattern: intended to be alternately red and green, but not consistently carried out. The zones in each scale are in three values of one color. Cusp forms: red, green, and blue, but not in consistent repeats.

The faces of the windows, two of which are illustrated in figures 102 and 103, are framed by rather wide ornamental bands with a red border on each side. While the motifs in these frames differ in detail from one another they all have the same general character and the same colors. The backgrounds are gray, the scroll and vine interlaces are yellow, to resemble gold, and they are outlined on both sides with black. Black lines are also drawn near the edges of the gray field to border the interlace patterns.

All the reveals of the windows (see fig. 86) were painted in variations of the ribbon meander pattern that was used to ornament the face of the conch of the apse (fig. 105). In each window the basic pattern is given a

different treatment, either in pattern, in color arrangement, or in scale of parts. Originally the dome was girdled by a chain of oak tie-beams at the spring line of the arches of the windows. These beams were cut at a later date but their stumps are still visible (fig. 86) where they emerged from the masonry. The original window frames were set farther into the windows than the modern ones, and were placed against the outer faces of the tie-beams. Thus the original interior reveals of the windows were much shallower than they are now. The meander pattern originally extended to the line of the outer face of the tie-beams. The unornamented areas of plaster are repairs executed by the staff. This plaster is toned a gray-yellow.